

THEORETICAL BASES AND PROCEDURES FOR INSTITUTING  
A MODEL FOR FACULTY DEVELOPMENT IN  
HIGHER EDUCATION

An abstract of a Dissertation by  
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The problem. The problem dealt with in this study is the concern for faculty development in a time of diminishing student enrollments, reduced faculty mobility, increasing pressure for accountability, and economic inflation. Faculty vitality and teaching effectiveness were found to be concerns within such an environment. The purpose of the study was to develop a model which would enable maximum development of existing personnel within an institution. The study actually served two functions; produced the model and served as a historical foundation for a three-year faculty development program at Drake University.

Procedures. It was shown that independent higher education institutions such as Drake University, without excessive outside regulations, provided a unique situation in which to pursue a program of needed change, faculty development, and evaluation. Following a thorough needs assessment through standardized instruments, literature search, visitation of parallel programs and information exchange with other institutions, goals were identified by the Faculty Development Office staff and the Faculty Advisory Committee. Alternatives for goals achievement were obtained from the faculty through proposed projects and Faculty Development Office sponsored seminars. Last, a non-threatening, qualitative, and quantitative evaluation was conducted on each project funded, to assess its effectiveness in meeting these goals. All evaluation instruments were designed for the specific needs of each project.

Findings. The developed model consisted of three parts: a modified example of a Task Analysis and Timeline for a 3-Year Program, which outlined the duties of the coordinator, researcher, and Faculty Advisory Committee (FAC) in assessing, implementing, and evaluating faculty development programs; a representative Outline for Instituting a Faculty Development Program From a Needs Assessment, which showed the importance of a comprehensive needs assessment for goals establishment, the advantages of faculty proposed projects for goals achievement, and the means for evaluating the effectiveness of such short-term projects and long range

climate changes; a Paradigm for Change and Evaluation in Faculty Development Within an Institution, which showed the separate, but parallel purpose to the Faculty Development Office (FDO), connected to the faculty by a projects screen. Involvement through faculty initiated projects, good communications, and a dedicated FAC help assure program acceptance and anxiety reduction. Well informed, organized, sensitive leadership were found to play integral roles in program success.

Conclusions. An historical baseline has been developed as part of the three year program at Drake University. The strength of the developed model appears to lie in its applicability to many institutions dealing with maximizing the effectiveness of existing professional personnel. The synthesized instruments provide effective guidelines for: 1) faculty proposed projects; 2) assessment of the merit of projects proposed for funding; 3) a proposals log for bookkeeping and quantification of FAC dispositions toward projects; and 4) Likert-type evaluation instruments for assessing the effectiveness of funded projects in meeting program needs and goals. However, further validity and reliability tests should be undertaken for necessary confidence.

Recommendations. Administrative priority helps to assure success. The advisory committee should have their normal work load lightened to assure adequate time for meetings and adequate, active participation. External evaluation should be undertaken periodically to assess progress. Establishment of a faculty development board should be explored with distinctive duties of assessment, implementation, and evaluation to help reduce bias and overload.

For Drake University specifically, the following recommendations were proposed: 1) reasons for student drop-out should be explored; 2) greater administrative and faculty importance should be placed on successfully utilizing standardized instruments at the college and departmental level for assessing climate changes; 3) an incentive system related to periodic review of faculty accomplishments should be explored; 4) the area serviced by Drake University should be assessed for specific needs; and 5) faculty development should become a permanent office, separated from the line bureaucracy.

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A Dissertation  
Presented to  
The School of Graduate Studies  
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by  
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## Chapter 1

### INTRODUCTION

#### PURPOSE

The purpose of this dissertation was to design a model for instructional and faculty development which could be used for colleges and universities. This design was prepared by reviewing, analyzing, summarizing, and evaluating (1) theoretical literature pertaining to the subject; (2) reports of empirical studies; (3) observations of developmental programs at selected institutions of higher education; and (4) experience with a foundation sponsored faculty development program at Drake University in Des Moines, Iowa.

The proposed model was designed to meet four major criteria: First, it was to provide a system for gathering valid and reliable data from which needs could be identified; Second, the model was to provide a framework in which a collegiate university could generate valid and realistic goals from identified needs; Third, it was to provide means to generate alternative methods to reach stated goals; Fourth, it was to provide methods of assessing the effectiveness of each alternative to members and clients of the university community.

## STATEMENT OF THE PROBLEM

A review of educational history reveals cycles of societal interest and impact. Higher education has progressively become more complicated, and subject to public pressure. Simultaneously, it is affecting more individuals, but with less agreement than in the past. In the late 1950's major crises were brewing in higher education, primarily because students felt they were being herded through an irrelevant education with little flexibility. In the mid-1960's incidents on campuses across the country forced change on higher education and society.

Ikenberry has said that the purpose of higher education today has arisen from the memorable past, needs of the present, and hopes of the future.<sup>1</sup> In general, he believes, institutions should serve three major functions: instruction, research, and public service.<sup>2</sup> Ewald observed that the philosophy of America as a nation, which education has not completely learned, even with its recent turmoil, is "Pragmatism".<sup>3</sup>

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<sup>1</sup>O. S. Ikenberry, American Education Foundations: An Introduction (Columbus, Ohio: Charles Merrill Publishing Company, 1974), p. 3.

<sup>2</sup>Ibid., p. 313.

<sup>3</sup>W. R. Ewald, Jr., Environment and Change: The Next 50 Years (Bloomington: Indiana University Press, 1971), p. 4.

Kerr, an educational optimist, observed that: education and society are mutually dependent.

Dependent on demography, dependent on the judgment of public authority, dependent upon the comparative performance of its competitors, dependent on the mercies of mass media, open to the surrounding community, vulnerable to attack against its own inadequacies, higher education today, as contrasted with a decade ago, is becoming more conscious that it is a sub-system within the total society and it does not lead a life entirely of its own design.<sup>1</sup>

There appears to be a widening gap between education and the public. Semas observed that in these times of economic instability and inflation, professors seek job security and tenure.<sup>2</sup> Kerr stated that society seeks relief from educational taxes and tuition hikes.<sup>3</sup> Zeckhauser and Zeckhauser pointed out that students want improved faculty performances and the assurance of a marketable skill.<sup>4</sup> Havelock observed that knowledge

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<sup>1</sup>Clark Kerr, "What We Might Learn From the Climteric," Daedalus, II (Winter, 1975), 3.

<sup>2</sup>P. W. Semas, "New Financing Plan Worries Canada's Academic's," The Chronicle of Higher Education, XIII, No. 21 (February 7, 1977), 5.

<sup>3</sup>Kerr, op. cit., p. 1.

<sup>4</sup>Sally Zeckhauser and Richard Zeckhauser, "Encouraging Improved Performance in Higher Education," Daedalus, II (Winter, 1975), 3.

explosion has placed strains on students and faculty.<sup>1</sup> According to Redfern, "Accountability"<sup>2</sup> is being demanded by administrators who are caught between government requirements for aid<sup>3</sup> and overworked faculties. Brodinsky's "Back to the Basics"<sup>4</sup> movement, in the age of innovation has added to the confusion.

Each of these scholars has suggested there is room for improvement in higher education, since it is here that many of the world's leaders begin their careers. The mission of educational institutions is to facilitate learning and acquisition of interpersonal relations skills. However, even with eighty percent of faculty involved in teaching,<sup>5</sup> or learning facilitation, little attention is paid to the art and evaluation of this aspect of the faculty member's

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<sup>1</sup>R. G. Havelock and others, Planning for Innovation Through Dissemination of Knowledge (Ann Arbor: University of Michigan, Institute for Social Research, 1976), p. 1-1.

<sup>2</sup>G. B. Redfern, How to Evaluate Teaching: A Performance Objectives Approach (Worthington, Ohio: School Management Institute, 1972), p. 7.

<sup>3</sup>R. W. Fleming, "Reflections on Higher Education," Daedalus, II (Winter, 1975), 12.

<sup>4</sup>B. Brodinsky, "Back to the Basics: The Movement and Its Meaning," Phi Delta Kappan, LVIII, No. 7 (March, 1971), 522-527.

<sup>5</sup>D. Light, Jr., "Thinking About Faculty," Daedalus, I (Fall, 1974), 262.

responsibility.

Eble observed that flexibility appears to be a key-stone to the future of faddish education.<sup>1</sup> He stated that this flexibility must become stability in motion, with the cultural values considered. Upon visiting 70 colleges and universities in the United States, he found that rigidity in physical facilities and curriculum almost limited teaching to traditional lectures, with little diversity to respond to student concerns, or sensitivity to societal or community demands.<sup>2</sup>

Gaff observed that few colleges or universities have instructional development programs; very few individuals participate if faculty development exists; budget allocations are generally meager, reflecting the institution's low concern for such ideas; few policies and guidelines are available for guidance; few trained and experienced consultants are available; and evaluation guides are generally nonexistent.<sup>3</sup>

A few institutions have begun to work with the educational realities of:

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<sup>1</sup>K. E. Eble, Professors as Teachers (San Francisco: Jossey-Bass Publishers, 1973), p. 19.

<sup>2</sup>Ibid., p. 11.

<sup>3</sup>J. G. Gaff, Toward Faculty Renewal (San Francisco: Jossey-Bass Publishers, 1975), pp. 177-78.

. . . decreased funding; steady or declining enrollment, limited faculty mobility, together with demands for accountability voiced by students, parents, and state and federal officials.<sup>1</sup>

Since learning facilitation, or teaching, is central to education, professors are being asked to re-examine their personal and professional perceptions toward instruction and relations to students. Berquist and Phillips found that in almost all programs, teaching is a large part of the faculty member's professional duty and should be highly valued; teaching is generally not a serious concern in the preparation of college professors; teaching is often neglected when considering promotion and tenure. They maintain that self, peer, and student evaluations of teaching should be vital aspects to incorporate in such considerations.<sup>2</sup>

Mayhew found that certain conditions are considered necessary for success in any faculty development program. First, adequate leadership must be available and supportive of constructive innovation and needed change; second, timing must be right for introduction to faculty members or reception from them; third, change must be viewed as needed by those involved, it must be gradual, it must also be in

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<sup>1</sup>W. H. Bergquist and S. R. Phillips, A Handbook for Faculty Development (Montpelier, Vermont: Capital City Press, 1975), p. 3.

<sup>2</sup>Ibid., p. 44.

general agreement with institutional goals in the beginning; and fourth, incentives, such as monetary rewards, reduced loads, and recognition for extended services, should be provided.<sup>1</sup> Zeckhauser and Zeckhauser observed that incentives have also been found to be a critical part of such program success.<sup>2</sup>

Program evaluation according to Gottman and Clasen, appears to be another critical issue in faculty development.<sup>3</sup> Effective evaluation systems were found to be nonthreatening, they encouraged participation and self analysis, and they were flexible. A few such systems are being developed, however, much remains to be done to assure societal accountability, faculty satisfaction, and improved teaching.

In today's economic situation, there is a real need for justifying educational expenses. Simultaneously, society, students, and educational financiers are demanding more accountability, practicality, personalization, and sensitivity to change.

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<sup>1</sup>L. B. Mayhew, How Colleges Change: Approaches to Academic Reform, U.S., Educational Resource Information Center, ERIC Document ED 125 607, July 1976.

<sup>2</sup>Zeckhauser and Zeckhauser, op. cit., p. 100.

<sup>3</sup>J. M. Gottman and R. E. Clasen, Evaluation in Education: A Practitioner's Guide (Itasca, Illinois: F. E. Peacock Publishers, Inc., 1974), chapter 2, *passim*.

New ideas and sensitivity to change pressures are needed. However, with the reduced mobility of faculty members accompanying the current economic inflation, infusion of change ideas by conventional routes is becoming increasingly difficult. Alternatives, including revitalization of existing staffs, institutions and budget and scheduling reorganization should be seriously attempted. Nimmer, a graduate student in science education at the University of South Dakota, found that needs of the area serviced by an institution could be economically and effectively assessed through brochures and postcard dissemination.<sup>1</sup>

The model proposed in this dissertation will seek to develop the methods for change recognition, involvement, assessment of alternatives, communications, and evaluation. Certain questions will need answering for these processes to occur.

#### QUESTIONS TO BE ANSWERED

• Can valid and meaningful data concerning faculty and students be gathered and interpreted in a manner useful for faculty in toward improving their teaching?

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<sup>1</sup>Opinions expressed by D. N. Nimmer, in an address, "Dissemination of Educational Information Through Various Media Channels," at The National Association of Research in Science Teaching Annual Conference, Cincinnati, Ohio, March 23, 1977. (Tape available with this author.)



- Can significant numbers of faculty be stimulated to become involved in faculty development?
- Can appropriate, faculty-initiated projects (workshops, seminar, consultant utilization, stipends, etc.) be designed and implemented to meet the needs identified through baseline data?
- Can effective instruments be developed to assess proposed projects?
- Can approved projects be evaluated for effectiveness in attaining the proposed needs and goals?
- Can an effective newsletter, memoranda, and interview system be developed to keep faculty and staff informed of program progress and insure feedback?
- Can a model be developed with the potentiality to facilitate the initiation, maintenance, and assessment of faculty development programs?

#### IMPORTANCE AND LIMITATIONS OF STUDY

The primary purpose of this study was to design a model to assess needs, generate and implement goals, and evaluate faculty development programs.

The importance of the study is to be found in the following provisions:

- It provides a summary of the literature concerning the history of change, faculty development, and program evaluation.

- It provides for effective utilization of resources in situations of economic inflation.
- It provides means for assessing needs, implementing appropriate change and evaluating effectiveness.
- It provides suggestions for increasing personal interaction within the program, to help reduce anxiety and fear.
- It provides suggestions for a blend of curricular, supervisory, and personal development.
- It emphasizes the importance of learning facilitation, or teaching.

The study grew out of involvement in the Drake University Faculty Development Program. The Drake University case study was used out of convenience and for the freedom independent higher education provides for innovation. The importance of this case study was that it was an actual documented case with strengths and weaknesses closely studied.

The primary importance of the model rests in its flexibility and adaptability. It may be utilized in its entirety, or in part. The model also appears to have application in many education, and other, institutional settings.

The program model may be valid for institutions similar to Drake University; however, its reliability in other types of institutions needs further study to assure greater confidence.

## Chapter 2

### REVIEW OF LITERATURE

This section deals with the literature related to three major aspects of effective innovation in higher education. Each is summarized before proceeding with the report and design of the model.

The section on Change in Higher Education deals with the justification of the need for it, initiation of change in a nonthreatening manner, and various change models. The section on Faculty Development explores the strengths and weaknesses of a variety of programs, emphasizing these aspects which appear to fit the model proposed in this study. The Program Evaluation section is concerned with the need for efficient evaluation, various effective nonthreatening evaluation programs, and the part evaluation plays in any systematic change.

### CHANGE IN HIGHER EDUCATION

#### Historical Background

The educated man is a product of his genetic inheritance and his sociological culture. "The establishment of written schools to provide formal education came with the development of written language in Sumeria around

3500 B.C."<sup>1</sup> The Chinese refined learning by 3000 B.C. and stated the "aims of education were to develop moral character and good judgment. The curriculum included reading, writing, history, etiquette, music, poetry, and philosophy of Confucius."<sup>2</sup>

The Greek philosopher Heraclitus stated 2500 years ago that "there is nothing permanent except change."<sup>3</sup> The Romans developed the first dichotomous schools based on the Greek ideologies and Roman practicality. "Control thyself"<sup>4</sup> was the maxim of the empire. From about 4 B.C. to the present, religion had an extensive, mixed influence on education.<sup>5</sup> John Locke summed up schools and their critical relation to teachers when he stated "the school that has good teachers needs little else, and the school that is without good teachers will be little better with anything else."<sup>6</sup> History has shown that a status quo mentality has dominated in all changing societies, and that education has

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<sup>1</sup>O. S. Ikenberry, American Education Foundations: An Introduction (Columbus, Ohio: Charles Merrill Publishing Company, 1974), p. 74.

<sup>2</sup>Ibid., p. 75.

<sup>3</sup>M. C. Nahm, Selections from Early Greek Philosophy (New York: Appleton-Century-Crofts, Inc., 1974), p. 87.

<sup>4</sup>Ikenberry, op. cit., p. 83.

<sup>5</sup>Ibid., p. 85.

<sup>6</sup>Ibid., p. 413.

typically lagged behind society. H. G. Wells brought education back to its responsibility to changing society in the statement "education is the preparation of the individual for the community."<sup>1</sup>

Thomas Jefferson tied the importance of education to American democracy in stating

if a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be. There is no safe deposit for the functions of government but with the people themselves nor can they be safe without information.<sup>2</sup>

The history of man has become a composite of his relations to change, and his involvement in this phenomenon.<sup>3</sup> Generations have repeated the errors of their predecessors, with few attempts at alteration, or questioning why such repetition became the modal operation.

In many instances, disturbance of the status quo has been almost universally rejected. Society seems content to remain a victim of its environment rather than living harmoniously with it through better understanding of needed select change. Education is an integral part of this understanding. Human history must not become what H. G. Wells referred to as "a race between education and catastrophe."<sup>4</sup>

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<sup>1</sup>Ibid., p. 20

<sup>2</sup>Ibid., p. 114.

<sup>3</sup>P. E. Burrup, Financing Education in a Climate of Change (Boston: Allyn and Bacon, Inc., 1974), p. 1.

<sup>4</sup>Ikenberry, op. cit., p. 3.

Logical change must be planned and anticipated.

### Contemporary Educational Change

A changing society must put stronger accent on knowledge of process planning, Ewald asserted, in order to offset the unfamiliarity and uncertainty that change imbues.<sup>1</sup> Traditional methods, mores and instructional attitudes might be adequate for the existent and known, but new economic, sociological and political situations require new knowledge. There needs to be, Ewald argued, an examination of new uses of present knowledge pertaining to the new questions, an intersection of many disciplines for answers, and an institutional attitude which seeks to facilitate the transfer of scientific methods to social usage.

At the college and university level, differences in the perceptions of individuals pertaining to goals, pose extensive problems for change groups trying to be effective from within. McNeil and Popham observed that professors are not noted for willingness to change their performance unless they can see a discrepancy between what they want to achieve and what they are actually achieving.<sup>2</sup>

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<sup>1</sup>W. R. Ewald, Jr., Environment and Change: The Next 50 Years (Bloomington: Indiana University Press, 1971), pp. 7-8.

<sup>2</sup>J. D. McNeil and J. W. Popham, "The Assessment of Teacher Competence," The Second Handbook of Research on Teaching, ed. R. M. W. Travers (Chicago: Rand McNally & Co., 1973), pp. 231-32.

Gruabard stated that educational institutions must come to reflect the quality of their instructional systems, curricula, and the value and diversity of their product.<sup>1</sup>

Ewald noted that currently, the only national philosophy of education is being reflected in short-sighted pragmatism.<sup>2</sup>

Kerr observed that after complaining about the apathetic attitudes of the 1950's, higher education was inundated by political extremists. These activists shook the credibility of the hallowed institutions to their very foundations. Nevertheless, though, enrollments have stabilized, and education, according to Kerr, as an American institution has passed from its "Golden Age to its Age of Survival,"<sup>3</sup> without seeming to have changed much. It appears, according to Sikes, Schlesinger and Seashore, that Benjamin Franklin's suggestion that "those who ignore history are doomed to repeat it," has gone almost unheeded in education, for many institutions are still unsure of their functions.<sup>4</sup> In addition, Sikes, Schlesinger, and

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<sup>1</sup>S. R. Gruabard, "Thoughts on Higher Education Purposes and Goals: A Memorandum," Daedalus, I (Fall, 1974), 6.

<sup>2</sup>Ewald, op. cit., p. 4.

<sup>3</sup>Clark Kerr, "What We Might Learn from the Climatic," Daedalus, II (Winter, 1975), 1.

<sup>4</sup>W. W. Sikes, L. E. Schlesinger, and C. N. Seashore, Renewing Higher Education from Within (San Francisco: Jossey-Bass Publishers, 1974), p. 19.

Seashore observed that educational institutions are unsure whether to lead or follow. This uncertainty, they assert, may also be the primary reason that few successful changes are internally initiated. Outside events: war, depression, civil rights, and economics have had extensive consequences on college campuses. Until recently, they assert, education, its administrators and staff, have been most reluctant to yield to, or foster change on any significant scale.<sup>1</sup>

A number of other critical problems have arisen, forcing education to seek constructive, well thought-out change.

. budget deficits have risen significantly since 1972 (Figure 1).

. operational costs have risen sharply since 1973 (Figure 2).

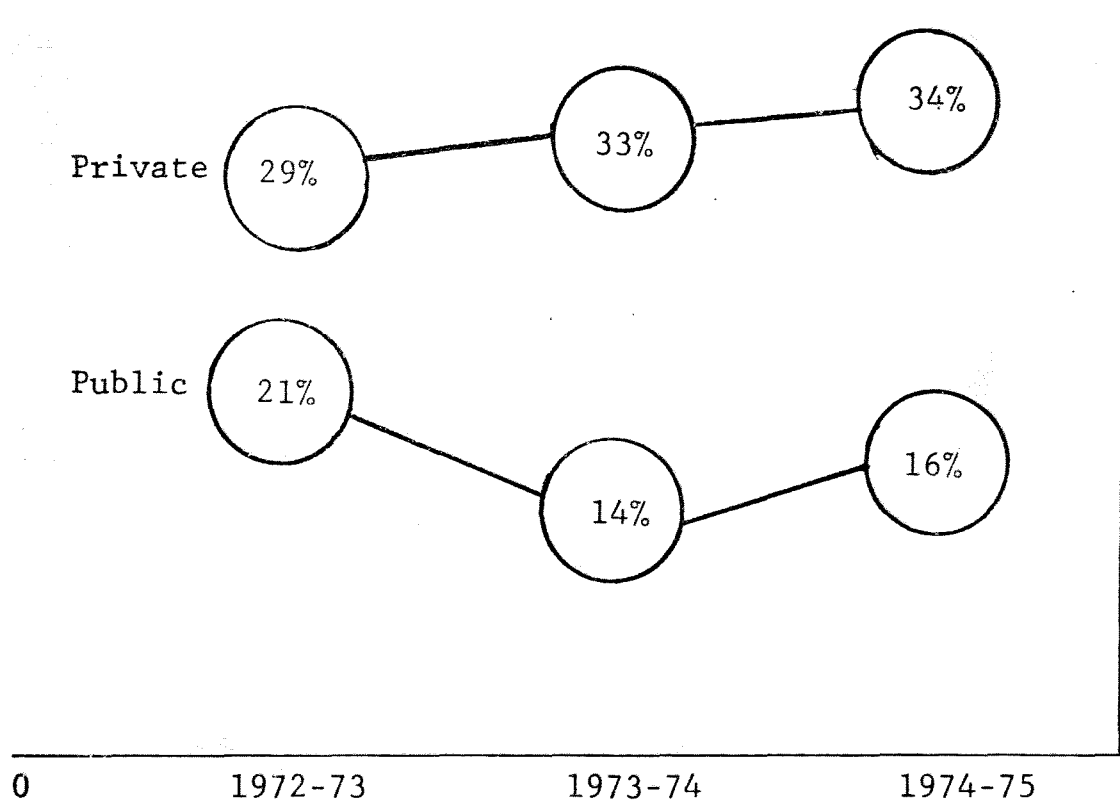
. budget costs-problems have shifted since 1971, with professional salaries showing little increase, fringe benefits decreasing, equipment costs quadrupling, and utilities costs tripling (see Table 11, Appendix A).

. tuition rates have tripled since 1960 for public and private institutions (Figure 3), while simultaneously the unemployment rate has been increasing for college graduates, raising real questions concerning the personal

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<sup>1</sup>Ibid., pp. 18-37.



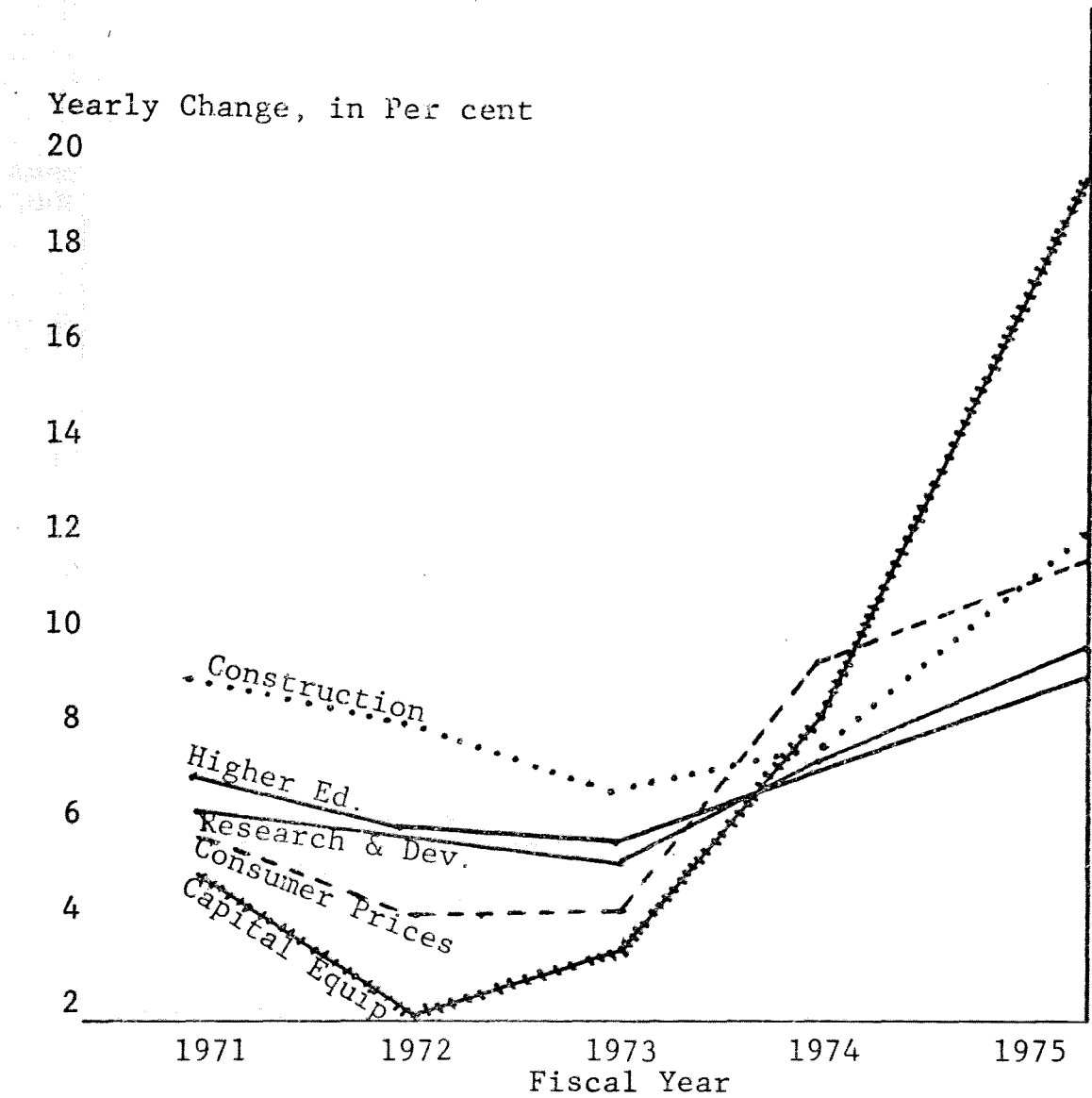


This chart is based on data from 226 private and 144 public colleges and universities of all types.

Figure 1  
Institutions with Budget Deficits<sup>1</sup>

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<sup>1</sup>Corbin Gwaltney, The Chronicle of Higher Education Desk Book 1976-77 (Washington, D.C.: Editorial Projects for Education, Inc., 1976), p. 112.

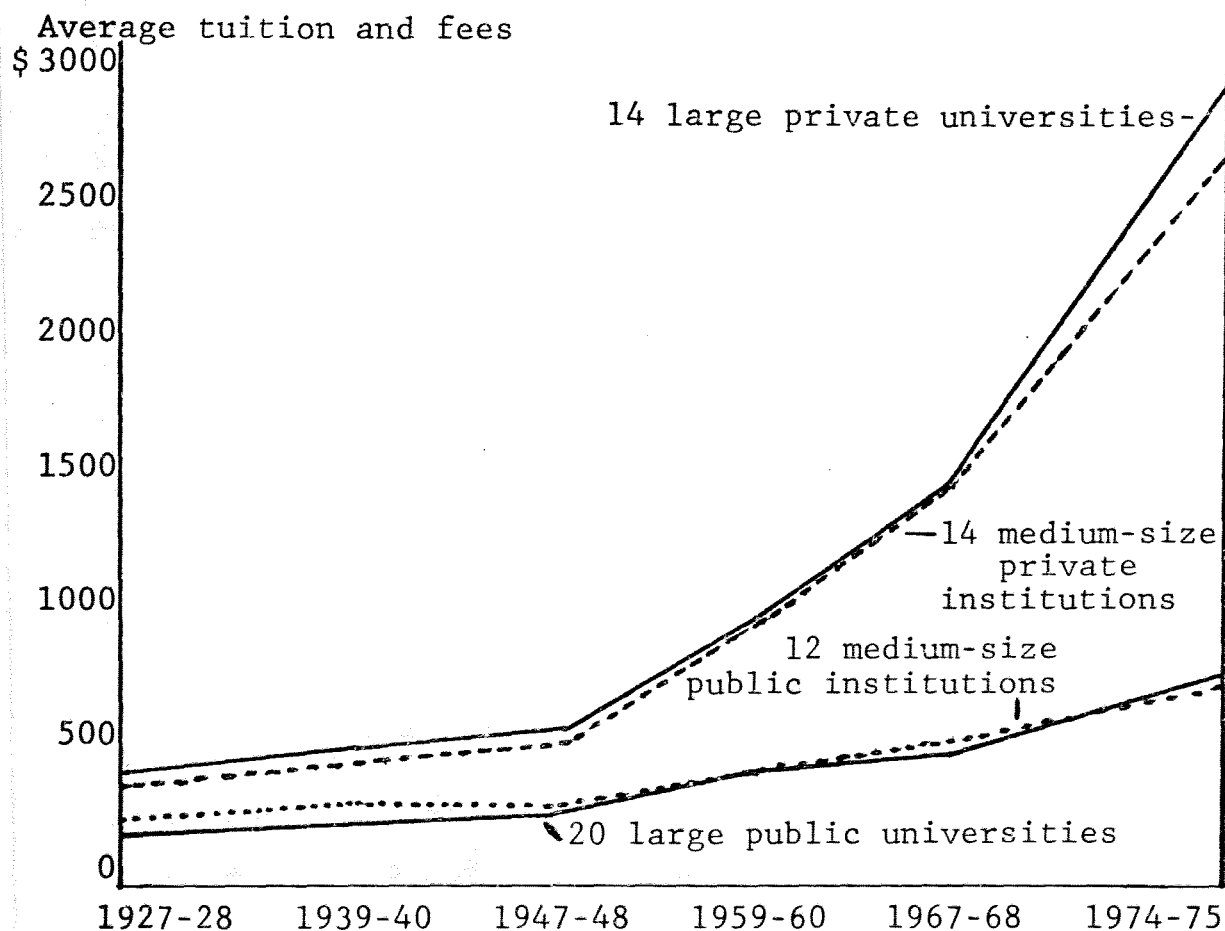


The Higher Education Price Index is compared, above, with other measures of inflation.

Figure 2

The Higher Education Price Index<sup>1</sup>

<sup>1</sup>Ibid., p. 113.



Average tuition rates have increased tenfold since 1928 at the institutions compared above.

Figure 3  
The Rise of Tuition Rates<sup>1</sup>

<sup>1</sup>Ibid., p. 121.

financial and time investment in a college education (Figure 4).

- . the drop-out rate remains high, raising the question of personal satisfaction with college, especially among female undergraduates (Figure 5).

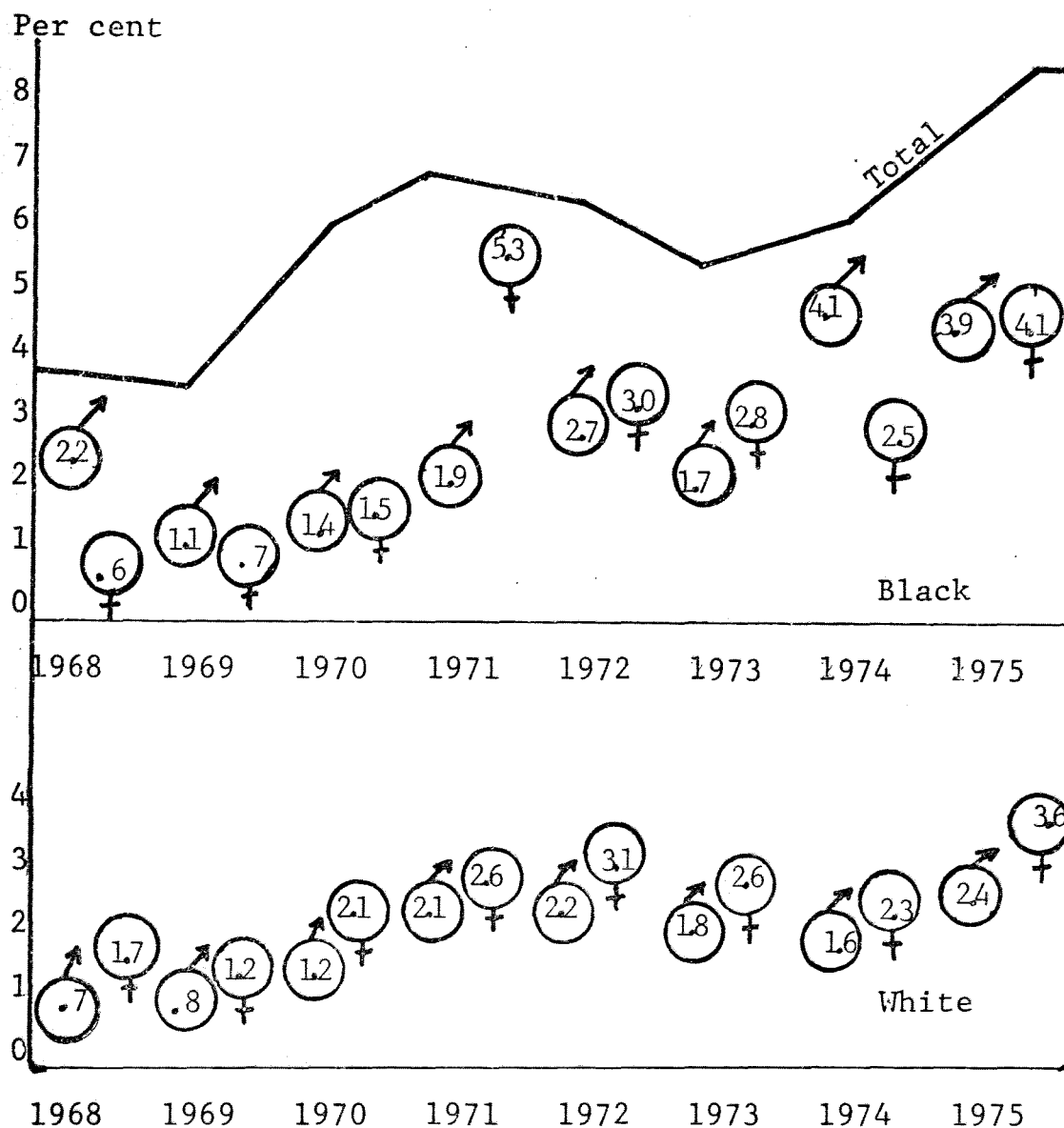
- . there have been major shifts in degree emphasis indicating area where institutions may capitalize on projected needs (see Table 12, Appendix A).

- . college is generally becoming an endeavor for elitists with lower income groups attending vocational schools. This tends to dichotomize society and possibly increase antagonism toward education (Figure 6).<sup>1</sup>

Eble stated that society, generally, no longer believes that educating more students will solve national problems. Most important is the need to break down barriers to understanding between the educational institution and the outside world. He argued that such an approach should not be viewed as a threat, but rather as an unique opportunity to respond directly to societal needs. One of the more acceptable ways would be to respond to public pressures to improve undergraduate teaching quality. This, Eble asserted, may eventually force most institutions to shift emphasis away from graduate research. Colleges, he observed, need

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<sup>1</sup>Ibid., pp. 110-210.

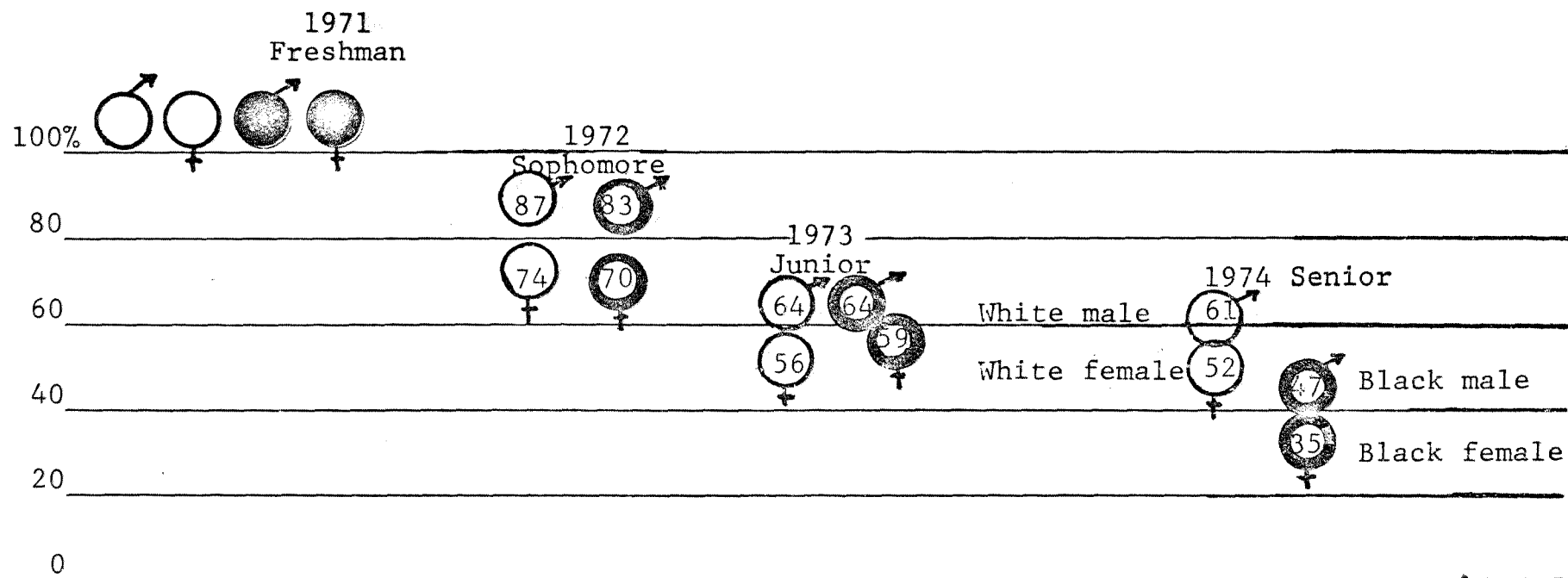


Percentages of college graduates unemployed--males, females, black, and white--are compared with the rates of unemployment in the total civilian workforce.

Figure 4

Unemployment Rates for College Graduates<sup>1</sup>

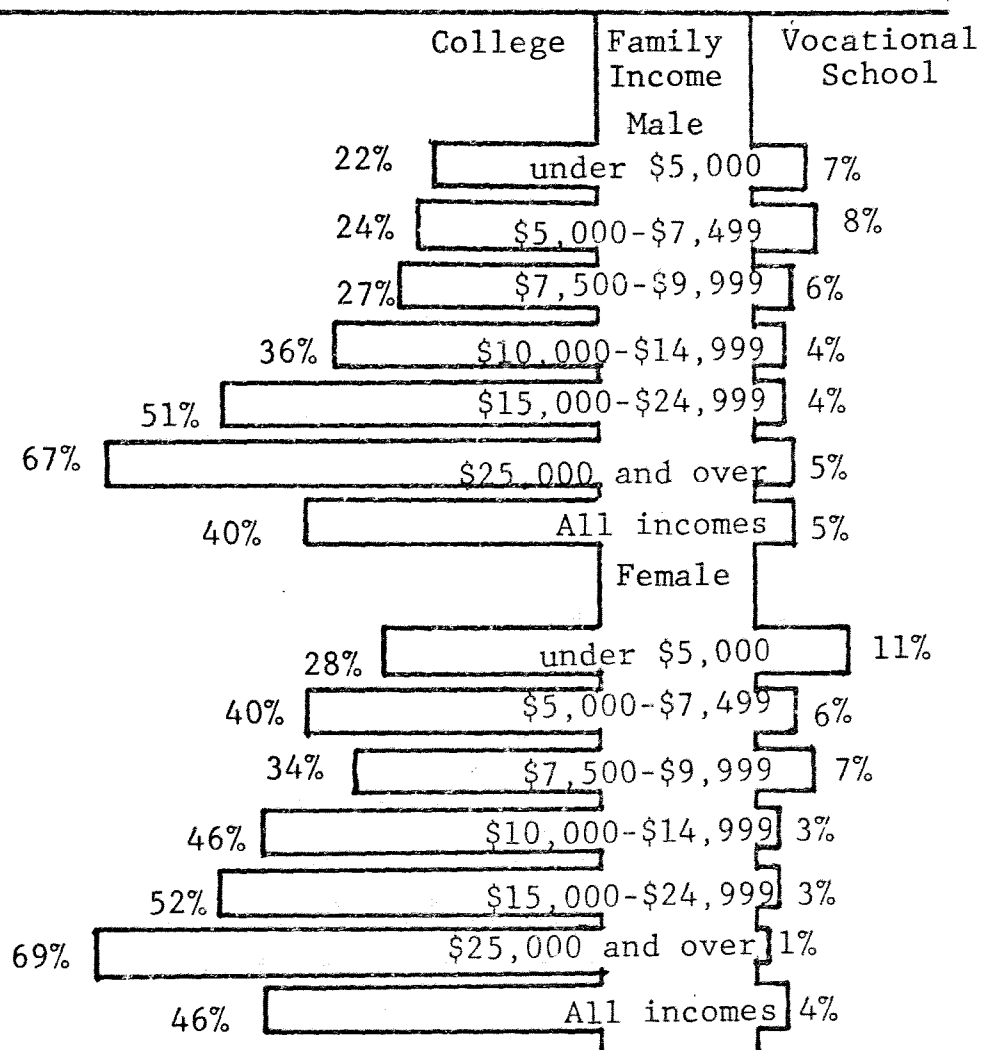
<sup>1</sup>Ibid., p. 204.



The percentages of students staying in college over a 4-year period are shown above. For every 100 black women enrolled as freshmen in 1971, only 35 remained as seniors in 1974.

Figure 5  
The College Drop-Out Rate<sup>1</sup>

<sup>1</sup>Ibid., p. 205.



The effect of family income on students' plans for attending college or vocational school is shown in this chart, based on information gathered in a fall, 1974, nationwide sample of high-school seniors.

Figure 6

Educational Plans for High-School Seniors<sup>1</sup>

<sup>1</sup>Ibid., p. 194.

to recognize that values need alteration to bring about desired educational change.<sup>1</sup>

The trend toward faculty unionism stemming from occupational dissatisfaction such as salaries, tenure, workload, and staff reduction<sup>2</sup> all center about static nature of educational growth.

Margarell indicated that due to the enrollment plateau of the traditional student age group (18-22 years old), and increase in enrollment among the nontraditional student (anything other than the 18-22 year old age group), a modification of educational direction is inevitable. (See Appendix A, Table 13.) Valley constructed a Typology of Learners (see Appendix A, Table 14), citing many advantages which the nontraditional learner brings to educational institutions, among them: longer range of learning, more definite career objectives, ability for self support, diverse backgrounds, and experience. The National Center for Educational Statistics (NCES) indicated what some states are already doing and where others could improve in Comparisons of Part-time Enrollments in Higher Education

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<sup>1</sup>K. E. Eble, Career Development of the Effective Change Teacher (Washington, D.C.: American Association of University Professors and Association of American Colleges, 1971), p. 7.

<sup>2</sup>"Stevens Faculty Ends Strike After 18 Days," The Chronicle of Higher Education, XIII, No. 23 (February 22, 1977), 4.



in Fall 1974. (See Appendix A, Table 15.) Hamilton and the Office of New Degree Programs are doing extensive work regarding nontraditional learner, showing, among other things, that the estimated demand for further education in Iowa (see Appendix A, Table 16), indicated great potential for nontraditional students. In addition, they explored subject area choices and found the first choices of subject areas among nontraditional learners were vocational in nature, followed by professional fields, general education, and home and family living. (See Appendix A, Table 17.)

The U.S. Census Bureau found dramatic changes between 1970 and 1974 in who goes to colleges. Among them were the dramatic increase in black enrollments of all age groups, but especially among adults (25-34); declines in white students between 18 and 24 years of age; and moderate increases in white adults (25-34) (Figure 7).<sup>1</sup>

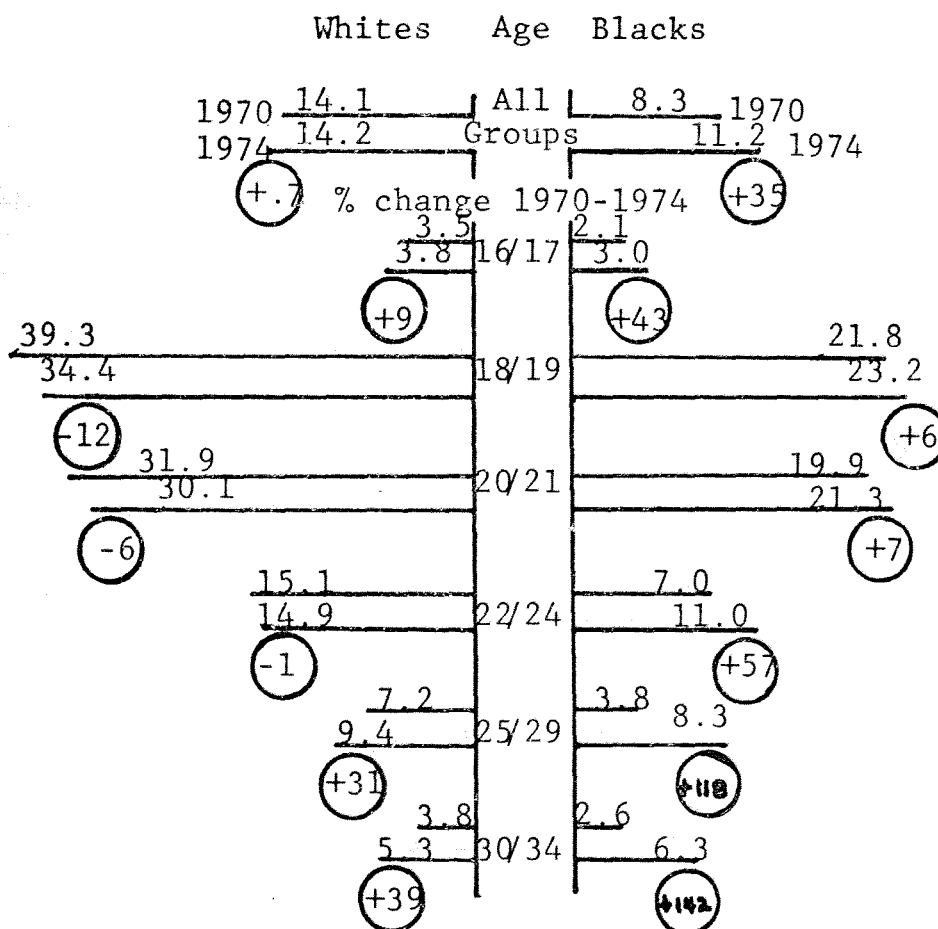
Burruup has stated "the value of education is social and economic growth and development."<sup>2</sup> In addition he found that due to the marginal utility of education "usefulness and utility of additional units of a particular item usually decreases as they are added."<sup>3</sup> Elementary and

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<sup>1</sup>Gwaltney, op. cit., p. 197.

<sup>2</sup>Burruup, op. cit., p. 24.

<sup>3</sup>Ibid., p. 28.



The percentage of the population enrolled in college is shown above by age groups for blacks and whites.

Figure 7

Who Goes to College

secondary education are easier to finance than higher education.<sup>1</sup> Burrup also observed that higher education was found to "suffer comparatively because it is unable to show in objective terms the measured and increased output provided with additional units of inputs."<sup>2</sup>

On the other hand the U.S. Chamber of Commerce claimed that

People who have a good education produce more goods, earn more money, buy and consume more goods, read more magazines and newspapers; are more active in civic and national affairs, enjoy a higher standard of living, and in general, contribute more to the economy than those who are not as well educated.<sup>3</sup>

Burrup also stated that

1. Rapidly changing conditions in the nation and in the world have greatly increased demands on schools ... The so-called costs of education are in reality investments in human capital ... No nation can remain in a leading position in science, business or industry if its commitment to education operates substantially below the level of other countries for any extended period. Thus, investment in education may really be investment for national survival.<sup>4</sup>

This observation would seem to indicate that higher education is worth the effort. This view is supported by

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 29.

<sup>3</sup>Chamber of Commerce of the United States, Education, An Investment in People (Washington, D.C.: Chamber of Commerce, 1955), Introduction.

<sup>4</sup>Burrup, op. cit., pp. 72-73.

Feldman and others.<sup>1</sup> They observed many changes in students who attended college. These students became more open minded, independent, flexible, and socially aware. It may be interesting to note that the greatest change occurred in all students within the first two years of college, but was amplified in women and high aptitude students. Further, Feldman noted, small liberal arts colleges made the greatest effect on students, apparently related to closer interaction with peers and faculty.

#### Characteristics of Change in Higher Education

Upon study of 100 institutions of higher education, Mayhew observed that successful change programs were characterized by a felt need for change, adequate leadership, a well developed institutional philosophy of education, good initiation timing, incremental change, adequate reward system for participants, involvement of innovators, sensitivity to external factors, and an adequate source of funding.<sup>2</sup> According to Havelock, such organizations possess two characteristic responsibilities: the ability to "maintain the system the way it is, and . . . change the system so

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<sup>1</sup>K. A. Feldman and others, The Impact of College on Students (San Francisco: Jossey-Bass Publishers, 1969), p. 19.

<sup>2</sup>L. B. Mayhew, How Colleges Change: Approaches to Academic Reform, U.S., Educational Resource Information Center, ERIC Document ED 125 607, July, 1976.

that it performs better."<sup>1</sup> Sikes, Schlesinger and Seashore also observed that successful change programs have similar humanistic values, student-centered curricula, and democratic student programs."<sup>2</sup>

Kerr observed that higher education has just passed through one of the greatest periods of turmoil in its history. It is presently approaching another crossroad. Unfamiliar forces are affecting its development and seeking to direct its future in new directions.<sup>3</sup> Societal pressures for accountability, student desired participation, economic pressures, sociological unrest, political pressures, and faculty dissatisfaction have all combined to produce turmoil in education. Kerr also noted that change goals are obviously needed to cope with some of these pressures. These change goals should be selected with due consideration to the basic principles of change and change agency.<sup>4</sup>

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<sup>1</sup>R. G. Havelock, The Change Agent's Guide to Innovation in Education (Englewood Cliffs, New Jersey: Educational Technology Publications, 1975), p. ix.

<sup>2</sup>Sikes, Schlesinger, and Seashore, op. cit., p. 27.

<sup>3</sup>Kerr, op. cit., p. 1.

<sup>4</sup>R. Harrison, "Classroom Innovation: A Design Primer," The Changing College Classroom, ed. R. Harrison and P. Runkel (San Francisco: Jossey-Bass, 1969), pp. 303-40.

### Change Agents

An effective change agent is essential to effective educational change. Havelock wrote that such agents must constantly bear six principles in mind. He stated these as goals for training change agents.

First, ... the process of change, how it takes place, and the attitudes, values and behaviors that usually act as barriers or facilitators. Second, ... he should be able to identify the innovators ... maintainers, ... and defenders or resistors ... in a particular area, ... and give these different voices a chance to be heard before final decisions are made. Third, ... a high level of awareness of new practices ... based on continued scanning of newsletters, press reports, and broad educational journals and magazines, ... potentially worthy of adoption by his system. Fourth, ... he builds a staff with a diversity of views and approaches, and he encourages dialogue among them. Fifth, ... change agent should always hold a total system view of change and its effects. Sixth, ... the administrator needs to be working constantly to build the internal self-renewal capability of his staff and organization as a whole.<sup>1</sup>

In addition, Havelock claimed that the change agent must become a catalyst to change; a solution giver, knowing where and when to give advice; a process helper, skilled in various stages of problem-solving, such as defining needs, setting objectives, acquiring resources, creating solutions, installing and adapting solutions, and evaluating solutions; lastly he must be a resource linker, bringing together needs

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<sup>1</sup>Havelock, op. cit., p. ix.

and resources as depicted in Figure 8.<sup>1</sup>

Rogers and Shoemaker observed, in a summary of empirical evidence, the following attributes which make change agents effective: a) the extent of change agent effort; b) empathy with clients; c) credibility in the eyes of his clients; d) higher social status among clients; e) higher education and literacy; f) cosmopolitaness, and g) homophily with clients.<sup>2</sup>

Havelock also identified six stages in the process of change (Figure 9). In Stage I, a viable relationship is established with the client system. In Stage II, the problem is diagnosed and the client's awareness of his needs is assessed. In Stage III, relevant suggestions for solutions are acquired from a diversity of sources. In Stage IV, a range of alternatives is generated, from which a potential solution fitting the needs of the client can be generated with minimum adaptation. In Stage V, client acceptance, through natural leadership, informal communications with client audience and pilot groups is achieved. In Stage VI, program stabilization, so that it becomes self-maintaining, while simultaneously providing the client

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<sup>1</sup>Ibid., p. 8.

<sup>2</sup>E. M. Rogers and F. F. Shoemaker, Communications of Innovations (New York: Free Press of Glencoe, Inc., 1971).

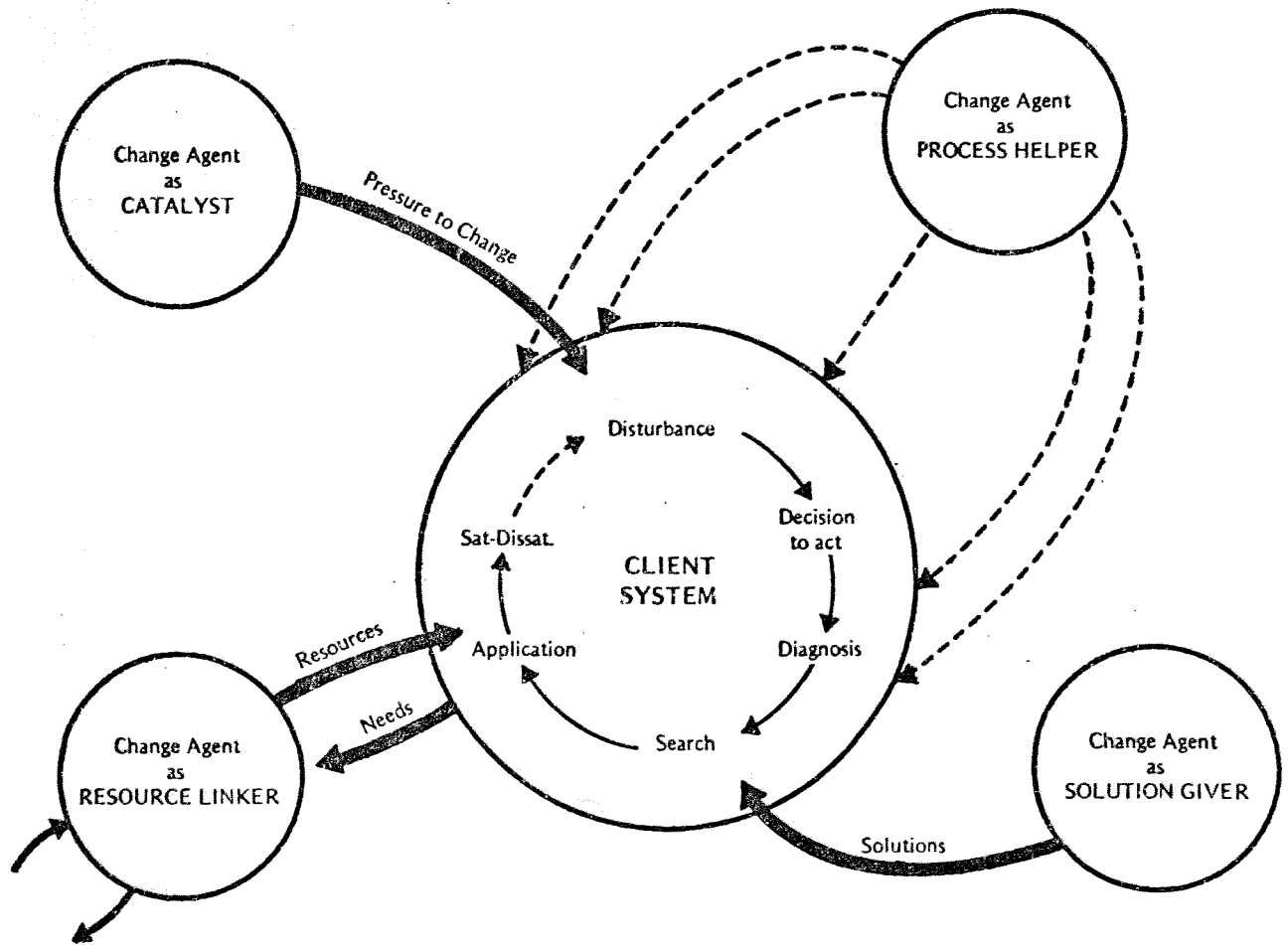


Figure 8  
Four Ways to be a Change Agent



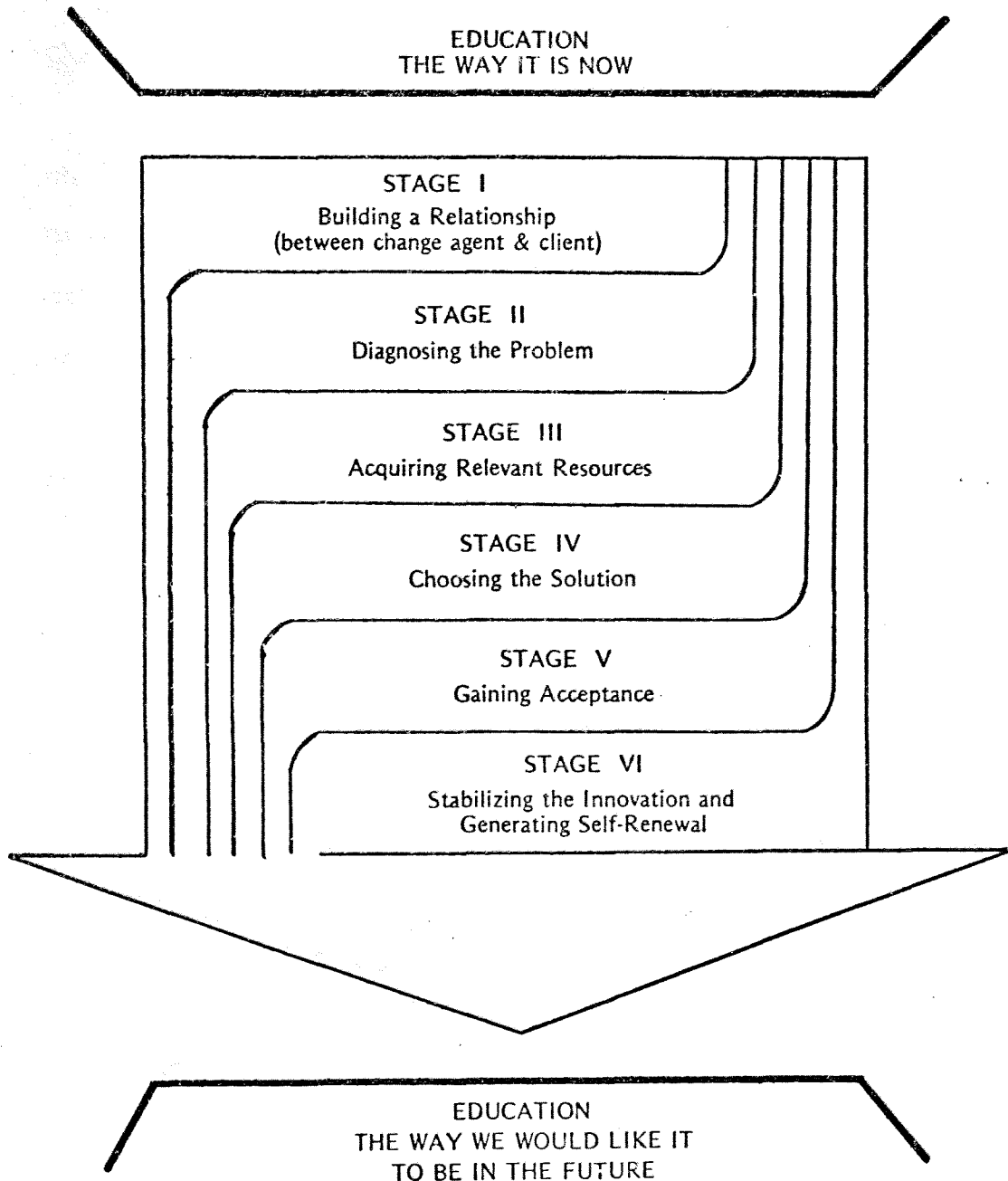


Figure 9  
Change Agent as Process Helper

system with a model for attacking new problems, is sought.<sup>1</sup>

### Change Models

Havelock and Havelock found, in a meeting of 50 change experts at the Michigan Center for Research on Utilization of Scientific Knowledge (CRUSK), six major ways of implementing the constructive change process. (See Appendix A, Table 18.)

The Research Development and Diffusion Model (RD & D) concept evolved by Brickell is guided by five assumptions.

First, it assumes that there should be a rational sequence in the evolution and application of an innovation. This sequence should include research, development, and packaging before mass dissemination takes place. Second, it assumes that there has to be planning, usually on a massive scale over a long time span. Third, it assumes that there has to be a division and coordination of labor to accord with the rational sequence and the planning. Fourth, it assumes a more-or-less passive but rational consumer who will accept and adopt the innovation if it is offered to him in the right place at the right time and in the right form. Fifth and finally, the proponents of this viewpoint accept the fact of a high initial development cost prior to any dissemination quality of the innovation and its suitability for mass audience dissemination.<sup>1</sup>

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<sup>1</sup>R. G. Havelock and M. C. Havelock, eds., Training for Change Agents: A Guide to the Design of Training Programs in Education and Other Fields (Ann Arbor: Litho Crafters, Inc., 1973), p. 11.

<sup>2</sup>H. M. Brickell, "Organizing New York State for Educational Change," Training for Change Agents: A Guide to the Design of Training Programs in Education and Other Fields, eds. R. G. Havelock and M. C. Havelock (Ann Arbor: Litho Crafters, Inc., 1973), p. 12.

This concept is shown graphically in Figure 10.

Two important propositions were derived from the RD & D Perspective as can be seen from their ratings by the participants.

Successful innovation usually requires formal planning, short-term and long-term.

How participants rated this point:

29 "essential"  
12 "very important"  
5 "somewhat important"  
0 "not important" ...

Innovation is more effective when evaluation, preferably in formal quantitative terms, is employed at each step of development, diffusion, and installation.

How participants rated this point:

8 "essential"  
28 "very important"  
11 "somewhat important"  
1 "not important".<sup>1</sup>

The second change model concept was the Social Interaction Process (S-I) advocated by Mort as shown in Figure 11.<sup>2</sup>

This...view of the change process places emphasis on the patterns by which innovations diffuse through a social system. A large body of empirical research tends to support five generalizations about the process of innovation diffusion: (1) that the individual user or adopter belongs to a network of social relations which largely influences his adoption behavior; (2) that his place in the network (centrally, peripherally, isolation) is a good predictor of his rate of acceptance of new ideas; (3) that

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<sup>1</sup>Havelock and Havelock, op. cit., pp. 14-17.

<sup>2</sup>P. R. Mort, "Studies in Educational Innovation from the Institute of Administrative Research," Havelock and Havelock, op. cit., p. 19.

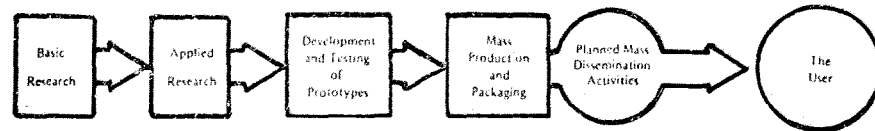


Figure 10

The Research, Development, and Diffusion  
View of the Change Agent

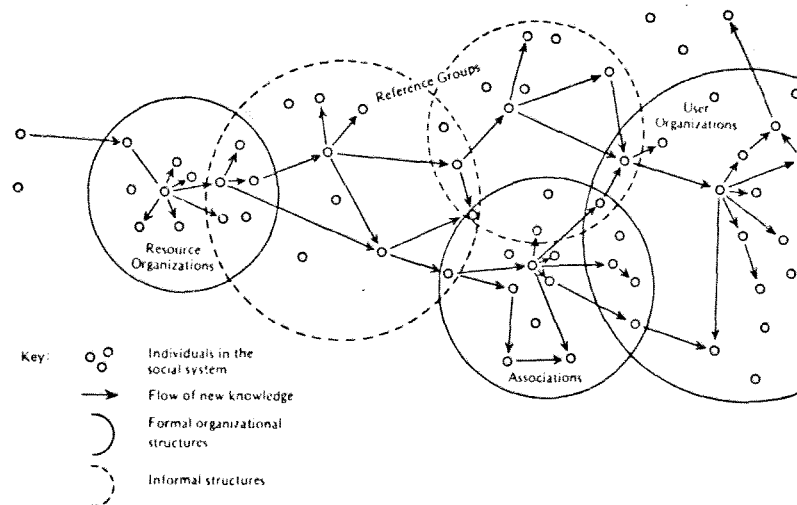


Figure 11

The Social Interaction View of the Change Process

informal personal contact is a vital part of the influence and adoption process; (4) that group membership and reference group identifications are major predictors of individual adoption, and (5) that the rate of diffusion through a social system follows a predictable S-curve pattern (very slow beginning followed by a period of very rapid diffusion, followed in turn by a long late-adopter or "laggard" period).<sup>1</sup>

Four notable propositions were derived from the S-I perspective as can be seen by the following participants' rating.

Effective dissemination and utilization are facilitated by informal opinion leaders, particularly when these opinion leaders are innovative in orientation and have considerable influence over a large number of colleagues.

How participants rated this point:

10 "essential"  
32 "very important"  
8 "somewhat important"  
0 "not important" ...

The adoption of new ideas and practices is strongly influenced by the perceived norms of the user's professional reference group. If the new behavior is seen as desirable or representative of the best practice "in my profession," it is more likely to be adopted.

How participants rated this point:

8 "essential"  
28 "important"  
13 "somewhat important"  
0 "not important" ...

Informal person-to-person contact is an important factor in effective dissemination, particularly when the user is at the trial stage.

How participants rated this point:

14 "essential"  
27 "very important"  
7 "somewhat important"  
0 "not important" ...

To achieve utilization, a variety of messages must be generated pertaining to the same innovation

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<sup>1</sup>Havelock and Havelock, op. cit., p. 18.

and directed at the potential user in a purposeful sequence on a number of different channels in a number of different formats. The resource system must act synergistically, bringing together a variety of messages and focusing them in combination, in sequence, and in repetition upon the potential user.

How participants rated this point:

16 "essential"  
20 "very important"  
8 "somewhat important"  
1 "not important".<sup>1</sup>

As Havelock and Havelock pointed out, the problem-solving approach to change is based on the assumption that innovation is an integral part of the problem-solving process. It is a patterned sequence of activities, originating with a needs assessment. Next, a problem statement is formulated. Then a search for innovation is performed. Finally, they assert, adaptation of the selected innovation to the original need is performed. The role of the outside change agent becomes consultative or collaborative.<sup>2</sup> Figure 12 illustrates this relationship.<sup>3</sup>

Three dominant propositions were derived from the problem-solver perspective as can be seen from the participants' responses.

The user's need is the paramount consideration in any planned change activity.

How participants rated this point on a pre-conference inquiry form:

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<sup>1</sup>Ibid., pp. 20-22.

<sup>2</sup>Ibid., p. 8.

<sup>3</sup>Ibid., p. 9.

26 "essential"  
 15 "very important"  
 7 "somewhat important"  
 0 "not important" ...

Users' needs cannot be served effectively until an effort has been made to translate and define those needs into a diagnosis which represents a coherent set of problems to be worked on.

How participants rated this point:

17 "essential"  
 23 "very important"  
 9 "somewhat important"  
 1 "not important" ...

User-initiated change is likely to be stronger and more long-lasting than change initiated by outsiders.

How participants rated this point:

20 "essential"  
 16 "very important"  
 4 "somewhat important"  
 0 "not important".<sup>1</sup>

Another model for change is the linkage process developed by Havelock as shown in Figure 13,<sup>2</sup> integrating the three previous models.

An effective change process requires linkage to more and more remote resource persons, and ultimately these overlapping linkages form an extended series which can be described as a chain of knowledge utilization connecting the most remote sources of expert knowledge in the university<sub>3</sub> with the most remote consumers of knowledge.

All subsystems of the society must be able to simulate each other's problem-solving and exchange messages concerning needs, problems, and solutions; but the efforts of all need to be coordinated and facilitated in accordance with an evolving concept of what the total dissemination

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<sup>1</sup>Ibid., pp. 8-10.

<sup>2</sup>Ibid., p. 25.

<sup>3</sup>Ibid., p. 24.

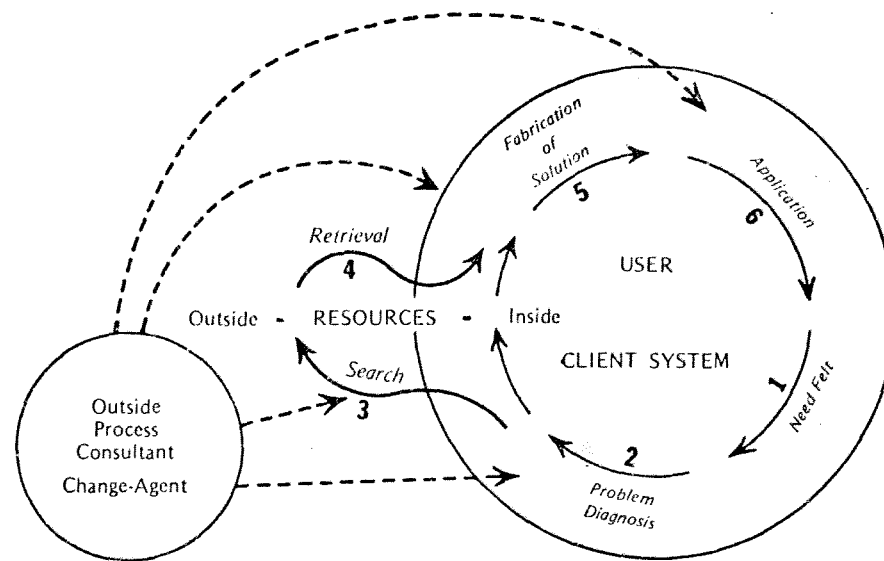


Figure 12

The Problem-Solver View of the Change Process

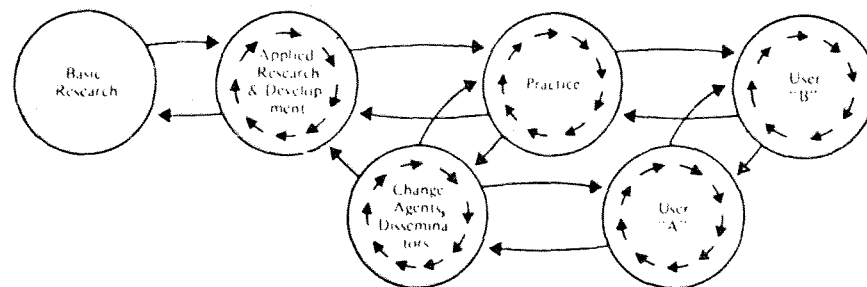


Figure 13

The Macrosystem of User-Resource Linkage:  
Society as a Problem-Solving System



and utilization system should become. This concept of a "total system" must be clearly oriented toward a definition of "the public interest" which safeguards, as much as possible, <sup>1</sup> the special interests of the subsystems involved.

Five major propositions were derived from the linkage view of change.

To be truly helpful and useful, resource persons must be able to simulate the user's problem-solving processes.

How participants rated this point:

17 "essential"  
21 "very important"  
6 "somewhat important"  
1 "not important" ...

Effective utilization requires reciprocal feedback.

How participants rated this point:

25 "essential"  
17 "very important"  
4 "somewhat important"  
1 "not important" ...

Resources systems need to develop reciprocal and collaborative relationships not only with a variety of potential users but also with a large diverse group of other resource systems.

How participants rated this point:

20 "essential"  
20 "very important"  
8 "somewhat important"  
0 "not important" ...

Users need to develop reciprocal and collaborative relations with a variety of resource systems (cosmopolitaness).

How participants rated this point:

10 "essential"  
30 "very important"  
8 "somewhat important"  
0 "not important" ...

---

<sup>1</sup>Ibid., p. 25.

A willingness to listen to new ideas (openness) is an important prerequisite to change. This applies both to resource persons and users.

How participants rated this point:

35 "essential"  
11 "very important"  
3 "somewhat important"  
0 "not important".<sup>1</sup>

Bennis, Benne, and Chin observed eight types of change programs.

Exposition and propagation, perhaps the most popular type of program, assumes that knowledge is power . . .

Elite corps programs grow from the realization that ideas by themselves do not constitute action and that a strategic role is a necessity for ideas to be implemented . . .

Human relations training programs are similar to the elite corps idea in the attempt to translate behavioral science concepts in such ways that they take on personal referents for the men in power positions.

Staff programs . . . idea . . . observe, analyze, and . . . plan rationally . . .

Scholarly consultation . . . includes exploratory inquiry, scholarly understanding, confrontation, discovery of solutions, and scientific advice to client.

Circulation of ideas to the elite builds on the simple idea of influencing change by getting to the people with power or influence.

Development research . . . is directed toward a particular problem, not necessarily a client, and is concerned with implementation and program . . .

Action research, . . . for . . . is identical to applied research generally except that in action research the roles of researcher and subject may change and reverse, the subjects becoming researchers and researcher engaging in action steps.<sup>2</sup>

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<sup>1</sup>Ibid., p. 25.

<sup>2</sup>W. G. Bennis, K. D. Benne, and R. Chin, The Planning of Change (New York: Holt, Rinehart and Winston, Inc., 1969), pp. 67-68.

The eight programs do have definite but unavoidable biases built into them. Bennis, Benne, and Chin recognize four such major biases.

Rationalistic Bias: No Implementation of Program. . . . Intelligent action requires commitment and programs as well as truth.

Technocratic Bias: No Spirit of Collaboration. Change typically involves risk and fear . . . Yet change efforts sometimes are conducted as if there were no need to discuss and "work through" these fears and worries . . .

Individual Bias: No Organization Strategy is Involved. This refers to strategies which rely on the individual while denying the organizational forces and roles surrounding him . . .

Insight Bias: No Manipulability. . . . It is not obvious that insight leads directly to sophistication in rearranging social systems or making strategic organizational interventions.<sup>1</sup>

### Change Implementation

Bennis, Benne and Chin also identified programs for implementing planned organizational change in three stages: training, consulting, and applied research.

Training . . . The main objective at first was personal change or self-insight. Since the fifties the emphasis has shifted to organizational development . . . Briefly, laboratory training unfolds in an unstructured group setting where participants examine their interpersonal relationships . . .

Consulting . . . Heavy emphasis is placed on the strategy of role model because the main instrument is the change agent himself . . .

Applied research . . . In the survey-feedback approach, . . . data are reported in "feedback" meetings where subjects become clients and have a chance to review the findings, test them against their own experience, and even ask the researchers to test some of their hypotheses.<sup>2</sup>

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<sup>1</sup>Ibid., pp. 68-69.      <sup>2</sup>Ibid., pp. 70-71.

Bennis, Benne, and Chin also observed that most planned change centers about all three stages, and that the client and agent must play a variety of roles. The intervention of the change agent is predicated upon many factors: "cost, time, degree of collaboration required, state of target system, and so on."<sup>1</sup>

The aspect of change, in any program, which is least understood is the implementation stage. Bennis, Benne, and Chin identified the necessary minimum elements which must be incorporated in any change program. First the client system needs a clear understanding of the change and its consequences, some control of the change fate, and trust in the change agent. Second, any change should be observed as self-motivated. This requires top management, or administrative support. Third, emotional as well as cognitive elements must be included. Fourth, the change agent should be able to reduce resistance to change. This requires a high quality client-change agent relationship.<sup>2</sup>

In another study, Griener found that seven approaches commonly used in organizational change.

The Decree Approach. A "one-way" announcement originating with a person with high formal authority and passed on to those in lower positions. . . .

The Replacement Approach. Individuals in one or more key organizational positions are replaced by other individuals . . .

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<sup>1</sup>Ibid., p. 71.

<sup>2</sup>Ibid., pp. 77-78.

The Structural Approach. Instead of decreeing or injecting new blood into work relationships, management changes the required relationships of subordinates working in the situation of organizational relationships, organizational behavior is also presumably affected . . .

The Group Decision Approach. Participation by group members in implementing alternatives specified by others . . .

The Data Discussion Approach. Presentation and feedback of relevant data to the client system by either a change catalyst or by change agents within the company . . .

The Group Problem Solving Approach. Problem identification and problem solving through group discussion with the help of an outsider . . .

The T-Group Approach. Training in sensitivity to the processes of individual and group behavior. Changes in work patterns and relationships are assumed to follow from<sup>1</sup> changes in interpersonal relationships. . .

Frymier and Hawn argued that progress in education depends on change. Their theory of change involves three phases: phase one is composed of intellectual activities such as planning, policy making, and hypothesizing; phase two, the doing phase; phase three, consists of the evaluation, assessment reflection and judgment phase. Maslow's hierarchy of needs, as well as values, were found to exert great influence on individuals' actions capitalizing on the halo effect and involvement for improving individuals and curriculum is essential for change. Newsletters and bulletins, advertising individual's efforts at constructive change is important as a means of reward, praise, and

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<sup>1</sup>Ibid., pp. 81-82.

encouragement.<sup>1</sup>

Alvin Toffler, futurist author, has said that contemporary society is in the post-industrial age, but that educational institutions persist in preparing students for the industrial mold. Greater individualization, empathy, and emphasis upon individual cultural and programs such as Iowa 2000, looking cautiously to the future are desperately needed.<sup>2</sup>

Kenneth Boulding, educational economist and poet, reflected this same argument concerning the post-industrial age and emphasized the effect slow moving, bureaucratic state educational systems have on needed change. Institutional and personal motivation, such as voucher plans, may instill more rapid change through healthy competition with private systems.<sup>3</sup>

New Jersey is presently studying a voucher system which may give more money to students and less directly to colleges. The report of the New Jersey Booher Commission recommended:

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<sup>1</sup>J. R. Frymier and H. C. Hawn, Curriculum Improvement for Better Schools (Worthington, Ohio: C. A. Jones Publishing Company, 1970), pp. 9-32.

<sup>2</sup>Opinion expressed by Alvin Toffler, in an address, "Politics Today and Tomorrow," at Drake University, Des Moines, Iowa, November 9, 1976.

<sup>3</sup>Opinion expressed by Kenneth Boulding, in an address, "Dilemma in Higher Education," at Kansas City Regional Conference on Higher Education, Kansas City, Missouri, January 22, 1977.

That the state more than double the proportion of higher-education funds channeled through grants to undergraduate students from the present 10.3 percent to recommended 23.6 percent. The proportion of state funds going to institutions would be correspondingly reduced.

That student aid be extended to part-time students and those enrolled in non-collegiate postsecondary education programs.

That state support for private colleges be channeled primarily through aid to students.

That the state provide equal subsidies for undergraduate education at all public colleges--60 percent of the cost per student.

That the state support graduate education at public institutions through subsidies, doctoral fellowships, and allocations for research activities.

That state support of county community colleges be adjusted according to each county's local taxing ability, and that county colleges be required to maintain an open-door policy for admission of students regardless of residence or ability to pay.<sup>1</sup>

Trow found that, in comparing a 1969 study with a 1975 study of 25,000 undergraduate, graduate, and faculty on various college campuses, a generally conservative trend had developed concerning educational issues. The report indicated religious beliefs remained steady. The report also showed that faculty unionization had increased, undergraduate and graduate students were more satisfied, the percentage of students desiring abolition of grades had dropped from 59 percent to 32 percent, an inflation of grades had occurred; however the percentage of faculty feeling teaching effectiveness was more important than publishing

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<sup>1</sup>"Give Students More Money, Colleges Less, N. J. Urged," The Chronicle of Higher Education, XIII, No. 18 (January 17, 1977), 2.

fell from 86 percent to 76 percent. However, attitudes toward women had become more liberal.<sup>1</sup>

Bowen observed that with the calm in education, it appears to be a good time to initiate needed faculty change for improved teaching. Private education seems to be an especially good place to begin. Bowen characterized private higher education as "steadiness without stagnancy." Furthermore, he stated that enrollments in private higher education showed a 1 percent increase in 1976, attrition rates remained constant, student/faculty ratios remained constant, and the net burden of debt declined, indicating that private universities may be the logical place to initiate change for efficiency.<sup>2</sup>

Margarell indicated in Table 19 (see Appendix A) that public colleges and universities enrollment appears to be at a stand still, while that of private institutions has continued to show modest growth.

During the past 10 years, public colleges and universities have gained enrollment at an average rate of 8.5 percent a year, more than four times the growth rate of private colleges and universities. This fall's (1976) enrollment

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<sup>1</sup>M. Trow, "A Conservative Trend on Academic Issues," The Chronicle of Higher Education, XIII, No. 18 (January 17, 1977), 6.

<sup>2</sup>Opinion expressed by Howard Bowen, in an address, "Values and Dilemma in Higher Education," at Drake University, Des Moines, Iowa, February 3, 1977.



survey, however, indicates private colleges and universities have gained 1.9 percent in enrollment, while the public institutions showed no gain at all.<sup>1</sup>

Still, many private, and increasingly public, institutions seek unique ways to attract prospective students to their campuses, Drake University's "sleeping bags weekends" is an example.<sup>2</sup>

Bowen stated there are large, relatively untapped sources of students, if education would cultivate a sensitivity to such societal needs. Upon observation of Table 1, Bowen's argument becomes clearer.<sup>3</sup>

Table 1

Untapped, Potential College Students

Year	Professional/Managerial % of Population	% of Others
1900	10	90
1940	15	85
1975	23	77

<sup>1</sup>Jack Margarell, "Public College Enrollment Growth Appears to be at a Stand Still," The Chronicle of Higher Education, XIII, No. 12 (November 22, 1976), 3.

<sup>2</sup>Janine Lehrer, "Recruiting Seen as Big Success," Times-Delphic (Drake University), November 19, 1976, pp. 1, 6.

<sup>3</sup>Opinion expressed by Howard Bowen, in an address, "Trends in Educating the Adult Learner," at Drake University, Des Moines, Iowa, February 4, 1977. (Tape on file in University Faculty Development Program.)

Professional and managerial percentages of the population have been increasing, however only 12 percent of these individuals are college educated, therefore a large potential population exists for sensitive educational institutions to draw from.<sup>1</sup> This population, which is older than 22 and already employed, is generally not viewed as potential students.

In order to attract this nontraditional group, scheduling flexibility and appropriate curricula should be developed. As Gruabard stated,

Higher educational institutions cannot wait for the demand to manifest itself and then respond by offering specific courses (probably in the evening). They ought, rather, to engage in systematic studies of what adults in a society like our own need to know, or would profit from knowing, and seek to make these things available to ever larger groups during the day, at night, on weekends, in the summer, and at many convenient sites.<sup>2</sup>

In addition, Cogan found two important items become conspicuous upon closer scrutiny of education's historical last half century.

The first is that almost every reform that attained national scope embodied some valuable innovative educational ideas that deserved to be incorporated into the instruction offered in the schools. The second is that most of the innovations were poorly understood in the schools (the activity school) or were starved for resources to implement them (the

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<sup>1</sup>Ibid.

<sup>2</sup>Gruabard, op. cit., p. 10.

core curriculum), and therefore delayed and deformed in their implementation (team teaching) and often perished, sweeping good ideas into oblivion along with the bad.<sup>1</sup>

Sergiovanni and Starratt succinctly summarized the change view which education should cultivate.

A school which emphasizes professional complexity, job satisfaction, decentralization, . . . as well as a de-emphasis of formalization, stratification, and efficiency, is more capable of nurturing meaningful educational change.<sup>2</sup>

Gruabard stated this more elaborately:

The change in the 1970s must come from within; from college and university administrators, obviously, but also from faculties, students, trustees, and alumni who share some kind of commitment to the possibilities of higher education. When sufficient numbers of these men and women have begun systematically to call for change, there is at least the possibility that state and federal legislators as well as corporate and private donors will begin to listen with new interest to what spokesmen for colleges and universities are saying. The new educational possibilities are immense; they need to be linked to the kind of society which the United States currently is but also to the one that it aspires to be. In the absence of a more subtle sense of the nature and requirements of the American democracy--in the absence of a more precise delineation of democracy's potentials--there can only be the partial and halting reforms of the moment, and with them the overwhelming preoccupation with budgets and administration. These last are not trivia; it would be

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<sup>1</sup>M. L. Cogan, Clinical Supervision (Boston: Houghton Mifflin Company, 1973), p. 2.

<sup>2</sup>T. J. Sergiovanni and R. J. Starratt, Emerging Patterns of Supervision: Human Perspectives (New York: McGraw-Hill Book Company, 1971), p. 163.

foolish to deny their great importance. They do not, however, give sustenance to a system<sup>1</sup> that needs desperately to clarify its goals.

In conclusion, education should consider, therefore, what society needs and is willing to support as important factors in determining the direction of change. Next, faculty and administration should become more aware of the need for the change; decide to make the attempt; explore the alternatives; collect supportive information for a program in general agreement with present values and incrementally meeting societal demands; implement the program, and finally evaluate its effectiveness.

### Summary

- . Change is inevitable.
- . Logical change must be planned and anticipated.
- . An effective needs assessment, including value as well as cognitive data, is needed to know when change is needed.
- . Change clients must see a need for change.
- . Change should be initiated incrementally to reduce anxiety and opposition.
- . Change must be realistic and understood by the change clients.
- . Knowledgeable, effective change agents can assure

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<sup>1</sup>Gruabard, op. cit., p. 11.

smooth, effective change.

. Effective change models possess all or most of the above characteristics.

. Effective implementation requires these stages: training, consultation and application of research, with extensive feedback.

. A number of events are currently pressuring education for change: inflation; increasing institutional deficits; prohibitive tuition increases; steady drop-out rates, leaving many students unsatisfied; accent on the nontraditional student population; college becoming elitist; increasing faculty dissatisfaction; accountability for action and funding being demanded; and decreasing mobility of faculty members.

## FACULTY DEVELOPMENT

### Historical Background

Faculty Development has been influenced by many events in educational history. Few individuals, according to Light, realize that prior to the current century, there were three primary models of the academic man and his institution. The English, or Oxford model, which was dominant in the eighteenth century, emphasized the mental disciplines for the ruling elite. The primary goal was to develop common social, moral, and intellectual characteristics of the ruling classes. The professor served as a moral and

intellectual model. The English model had extensive effect on the America's elite colleges and universities from the seventeenth through the nineteenth centuries.<sup>1</sup>

The second model, recognized by Light, was the Scottish, or practicality-based, idea. This system was based on public, and open, higher education, sitting atop a broad base of public education. The professor was valued for what he knew. In America this system became reflected in the Land Grant institutions.<sup>2</sup>

The third model, outlined by Light, was the German, or scientific system. The greatest difference between this model and the English and Scottish was its neglect of teaching, except for training future scientists. The professor was recognized as someone who discovered new frontiers through research. This system transformed the American system into a system of specific disciplines, each with their own literary societies, journals and distinctive identities. The elective system, proposed by Eliot enabled faculty to pursue their individual research. This system grew in importance and pushed the private and denominational colleges to the educational periphery. It also made education one dimensional, thus reducing diversity.<sup>3</sup>

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<sup>1</sup>D. Light, Jr., "Thinking About Faculty," Daedalus, I (Fall, 1974), 260-61.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

Eble observed one of the major problems with higher education today to be its lack of diversity. Eble found, upon observing 70 colleges and universities in 40 states, that the traditional lecture dominated all areas of instruction. He also observed that the physical structure of institutions actually encouraged this method almost solely. Very little technology was found to be incorporated though this is the age of the technological advances and communication. Very little faculty and student or peer interaction was encouraged. Very little practical teaching outside the classroom was observed. Eble also stated that mass education through the homogeneity of curriculum, credit hours, assignments, testing, grading certifying was found uninspiring, and a very inappropriate preparation for life.<sup>1</sup> The catalogue offering 2000 courses, he observed, may be misleading in its validity. "A degree of ad hocness needs to enter the curriculum."<sup>2</sup>

The best improvement in any curriculum may follow from a firm agreement that no course last beyond five years. It may not even matter too much if faculty members subvert the intent by seeing to it that many changes are in name only.<sup>3</sup>

The actual beginning of a faculty development,

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<sup>1</sup>K. E. Eble, Professors as Teachers (San Francisco: Jossey-Bass Publishers, 1973), pp. 1-20.

<sup>2</sup>Ibid., p. 19.

<sup>3</sup>Ibid.

instructional improvement, or curriculum review, however, requires that specific steps be followed. Eble observed that, among these steps, a certain portion of the institution's operating expenses should be allocated to faculty development, specifically for development of teachers and teaching. A regular, continuing program encompassing all aspects of faculty development should exist. Major academic responsibilities should reside in a single administrative office.<sup>1</sup>

Eble also observed that the program itself should include: needs of the beginning teacher; grants and leaves for mid-career and older teachers, possibly on a competitive basis; departmental grants, designed to add competence to faculty members; support for non-teaching portions of the institution, which support teaching; coordination with an evaluation and assessment system; reward system within departments, designed to improve teaching; information concerning exchange programs, innovations at other campuses, and faculty development systems.<sup>2</sup>

#### Theoretical Bases for Faculty Development

Faculty development is based on a good understanding of the nature of supervision. According to Sergiovanni, newer supervisory models are emerging which enhance

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<sup>1</sup>Ibid., p. 129.

<sup>2</sup>Ibid., p. 130.



institutional change.

They depend largely upon promoting personal and professional growth of the entire staff as a means of effectively managing the schools enterprise . . . Client enrichment is, after all, at the apex of any hierarchy of school purposes.<sup>1</sup>

Sergiovanni also asserts that supervision is a process which enhances the achievement of institutional goals.<sup>2</sup>

There are many models which enhance the effectiveness of supervision in educational settings. Getzels and Guba's social system formulation consists of two interdependent but interacting dimensions. The first dimension is the institution or nomothetic, defined in terms of its roles, which are subsequently defined in terms of role expectations necessary to fulfill the goals of the institution. The second dimension, the ideographic, deals with the human element of social systems. The roles are defined similar to those expected for institutions.<sup>3</sup> The two dimensions are in constant interaction as can be seen in Figure 14. The model seeks to identify conflict situations which may result between individual and institutions. Role-personality conflicts resulting from discrepancies

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<sup>1</sup>Sergiovanni and Starratt, op. cit., pp. 9-10.

<sup>2</sup>Ibid., p. 10.

<sup>3</sup>J. W. Getzels and E. G. Guba, "Social Behavior and the Administrative Process," The School Review, LXV (1957), 423-441.

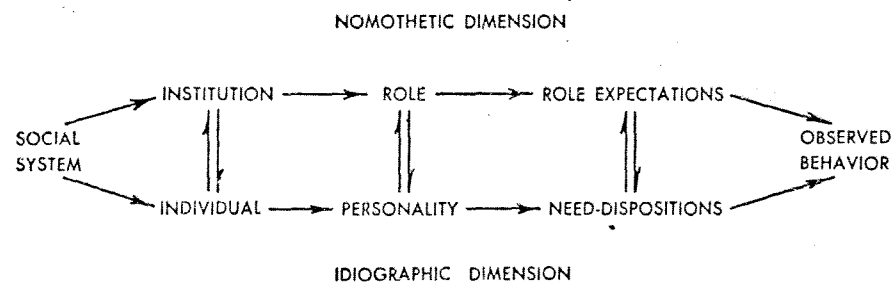


Figure 14

General Model Showing the Nomothetic and the  
Idiographic Dimensions of Social Behavior<sup>1</sup>

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<sup>1</sup>Ibid., p. 429.

between expectations of a certain role and needs of the individual may be anticipated and alleviated.

The theoretical bases for faculty development programs appear not only in supervision models, but also in curriculum models.

Taba worked extensively in the area of curriculum development theory. She developed a framework for curriculum development consisting of seven steps based on the expansion of the basic four-step curriculum model (Figure 15). These seven steps are: diagnosis of needs; formulation of objectives; selection of content; organization of content; selection of learning experiences; organization of learning experiences; and evaluation.<sup>1</sup>

Notice that before objectives are formulated, "needs" are examined. These needs include the needs of society, the needs of the individual student, and the demands of the disciplines of knowledge. Sometimes this first step is the most important since it affects all the other steps quite radically.<sup>2</sup>

Tyler also did extensive work on early curriculum development, however, he refined the seven statements back to four basic questions.

More recently, Frymier and Hawn worked extensively outlining how people who work together can improve the

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<sup>1</sup>H. Taba, Curriculum Development: Theory and Practice (New York: Harcourt, Brace and World, 1962), pp. 9-14.

<sup>2</sup>Sergiovanni and Starratt, op. cit., p. 226.

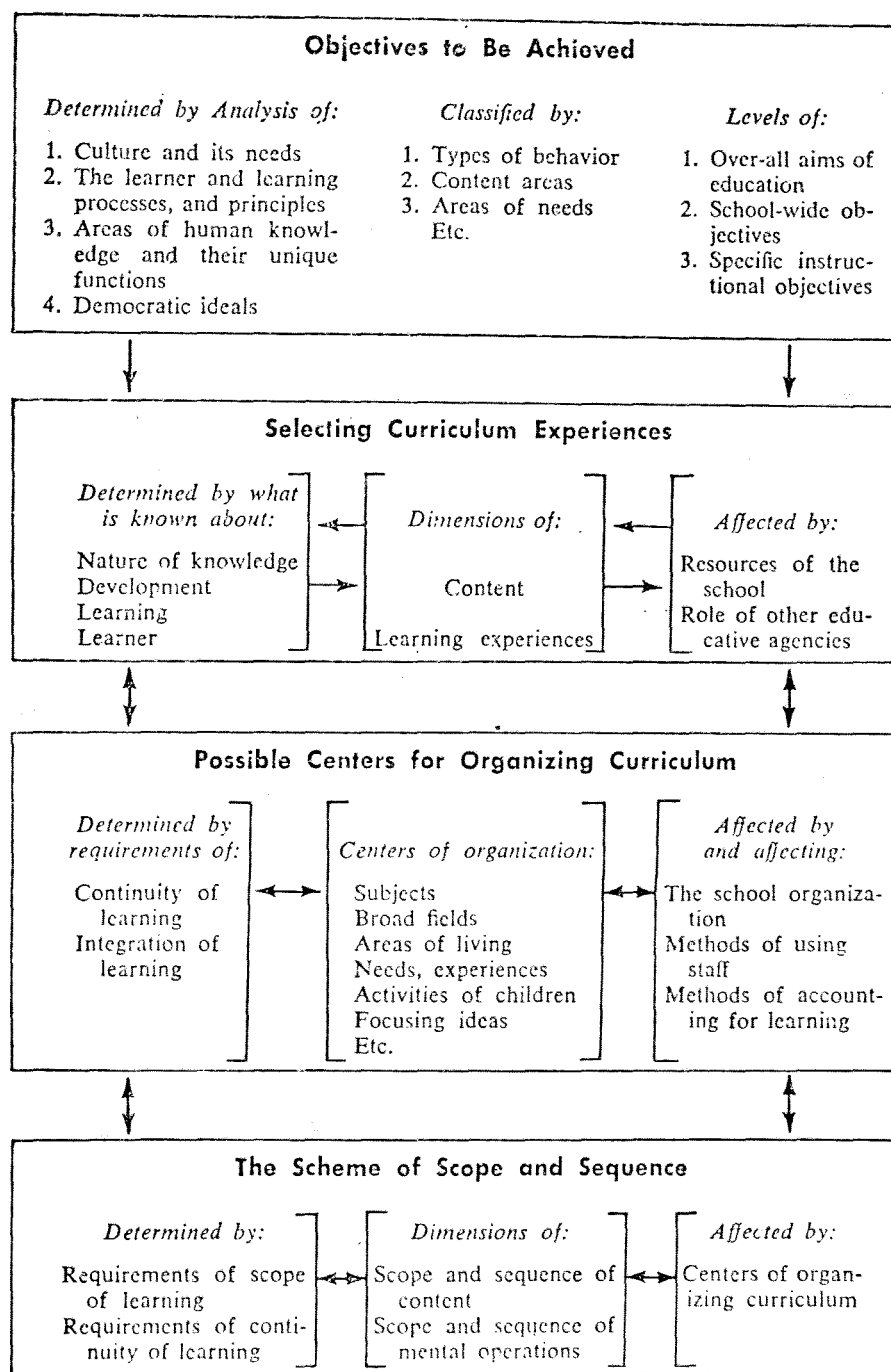


Figure 15  
A Model for Curriculum Design<sup>1</sup>

<sup>1</sup>Taba, op. cit., p. 438.

quality of their educational programs. They stated that

Curriculum improvement requires curriculum change; change should be predicated upon good information, good relationships, and a good rationale; and being a curriculum change agent requires sensitivity, intelligence, experience, and skill.<sup>1</sup>

Frymier and Hawn observed that curriculum improvement is a "people problem." To improve the curriculum requires developing, nurturing, broadening, uplifting, and revitalizing the lives and minds of those implementing curricular decisions every day.<sup>2</sup> They further believe that every effective social system requires three phases of operation: phase one includes the intellectual activities such as planning, policy-making, and hypothesizing; phase two is the doing phase; and phase three is the evaluating or reflecting phase. Critical in this process is corrective feedback, and the concept that evaluation should be accomplished by a separate group.<sup>3</sup>

From these curricular experts, it becomes apparent that curricular and faculty development are intertwined and actually enhance one another. In addition, certain faculty and curricular development commonalities emerge to produce effective programs.

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<sup>1</sup>Frymier and Hawn, op. cit., p. 5.

<sup>2</sup>Ibid., p. 6.

<sup>3</sup>Ibid., pp. 9-12.

### Characteristics of Effective Programs

All faculty development programs have certain effective commonalities. Gaff observed that these similarities and differences centered about three areas of developmental emphasis. The following characteristics emerged from his statement on what is needed in successful programs.

Colleges and universities should take special steps to see that the teaching faculty knows about current educational criticisms, research findings, change proposals, and innovative programs . . .

. . . there should be periodic reviews of the instructional program and proposals for its improvement . . . Periodic review can revitalize an established program while providing a basis for the development of new ones.

. . . there should be institutional policies and procedures favorable to the creation of alternative teaching and learning environments which transcend the limitations of such traditional concepts as a self-contained campus, a curriculum isolated from the rest of student life, a fragmented disciplinary approach to teaching, standardized courses, and a single program.<sup>1</sup>

Gaff says the ideas of professional and faculty development, such as sabbatical leaves, travel for conferences, and research support, are not new. However, the increased opportunity related to specific development of professional and teaching rules is new. Centers devoted to these specific ends are beginning to appear on the college,

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<sup>1</sup>J. G. Gaff and R. C. Wilson, "The Teaching Environment," American Association of University Professors Bulletin, LVII (December, 1971), 490-93.

university, regional, and national level.<sup>1</sup>

Programs differ considerably in focus. Depending on what aspects of the teaching-learning process they emphasize . . . Faculty-development programs . . . focus on faculty members rather than on the courses they teach or their organizational environments; . . . In contrast, instructional-development programs . . . focus on the design of effective conditions of learning, particularly as provided by courses, emanating from their roots in the fields of curriculum and instruction, learning theory, educational media and technology, and system theory. And organizational-development programs . . . focus on the environment within which students, faculty, and administrators work; . . . The most successful programs include elements of all three approaches in a comprehensive endeavor.<sup>2</sup>

There is a well defined movement toward institutional improvement, especially as it relates to better teaching. The creation of a number of institutional research offices attests to the degree of importance attached to the movement. A high degree of consciousness has developed about the need to provide faculty renewal opportunities and more effective teaching to a greater diversity of students. However, actual experience with in-service programs at the university level has been very limited. Most programs have stemmed from outside funding sources. The decision then becomes, whether the programs are sufficiently defined and meritorious of continuation after outside resources have

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<sup>1</sup>J. G. Gaff, Toward Faculty Renewal (San Francisco: Jossey-Bass Publishers, 1975), pp. 177-78.

<sup>2</sup>Ibid., p. 174.

been expended.

If successful, the new ideas concerning instructional improvement will bring fundamental and lasting change to academic life. They can lead to an increase in the importance of teaching among faculty, the revision of institutional policies and practices to provide greater support for teaching effectiveness, a redefinition of professional activity to include regular and repeated participation in in-service education, and the re-allocation of resources to finance instructional-improvement efforts . . . But, if the current efforts fail to improve teaching or learning, the current flurry of interests in them will be nothing more than a passing fad, and academic life will return to the way it was before the notion arose that faculty, instruction, and organizations can and should be systematically developed.<sup>1</sup>

These ideas can be shown graphically in Table 20 (see Appendix A).

The real test of such programs will be their long term effect. Most proposed programs are also working within the constraints of the traditional institutional framework. The possibilities of significant long term changes within this constriction cannot be expected to be great. The need for a change in the philosophy of the institutional program development must be consistent with an explicit and coherent philosophy of education, if any progress is to be made.<sup>2</sup>

Another factor to be considered is the removal of barriers to encounters between faculty and students. The curriculum, as part of the institutional and faculty development program, should create conditions for close, frequent,

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<sup>1</sup>Ibid., p. 177.

<sup>2</sup>Ibid., p. 182.



continuous interaction between faculty and students, in and out of formal classes.

Faculty influence appears more pronounced at institutions where association between faculty and students is normal and frequent, and students find teachers receptive to unhurried and relaxed conversations out of class.<sup>1</sup>

This situation, generally observed in small residential four year colleges, become especially critical when one recognizes many such institutions are in financial jeopardy today.

Gaff observed that what has actually been occurring has been a fragmentation of the curriculum; a separation of curriculum from the remainder of the student's life; separation of facts from values; separation of faculty from students, and divorcement of the institution from society.<sup>2</sup>

Integrative programs are very much needed, and their success may depend on their originating from faculty to be accepted and to meet student needs.

These new programs and their activities will be judged primarily in terms of the impact that they have on the lives of students. . . . This means that instructional-improvement programs ought to help the faculty develop the attitudes, competencies, and techniques to realize . . . objectives:<sup>3</sup>

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<sup>1</sup>P. Jacob, Changing Values in College (New York: Harper and Row, 1957), p. 8.

<sup>2</sup>Gaff, op. cit., p. 184.

<sup>3</sup>Ibid., pp. 184-85.

Among these objectives were: the ability to interest, motivate and stimulate students to learn certain subject matter due to its value to them; the ability to teach students higher mental skills as opposed to mastery of facts; the ability to aid students to explore and develop values related to factual information; the ability to carry teaching beyond given disciplines, and the classroom; the ability to become effective counselors; the ability to implement a holistic curriculum, as opposed to fragmented disciplines; the ability to maintain informality among students, while supporting formal curricular and student development.<sup>1</sup>

Bergquist and Phillips observed that almost all faculty development programs center about three basic propositions.

teaching is an important aspect of the college faculty member's professional role and hence should be highly valued, . . . teaching is frequently not a serious concern in the training of college faculty, and . . . teaching is often neglected in issues of promotion and tenure.<sup>2</sup>

It is generally agreed that the development of professors' teaching skills is a desirable goal; but just how

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<sup>1</sup>Ibid., p. 185.

<sup>2</sup>W. H. Bergquist and S. R. Phillips, A Handbook for Faculty Development (Montpelier, Vermont: Capital City Press, 1975), p. 3.

to develop these qualities has never been clearly delineated. Astin and others have stated the view that

Some critics appear to believe that teaching would improve if only professors drawn astray by the sirens of research, or lulled by the boredom of pedagogical routine, had their classroom performances sharply evaluated. Other critics seem to hope that a new curriculum, style of teaching, form of governance, or more relevant purpose would generate the necessary qualities, as if a new system requiring sensitivity and endurance would necessarily also elicit them.<sup>1</sup>

Astin and others observed that many forces have combined to produce this climate of concern: the need for experimentation within the institution to reform the outside; the demand for accountability for services required by students and society; and declining academic intra and interuniversity mobility.<sup>2</sup>

Astin and others also noted that in today's time of economic stress and student quiescence, faculty development programs appear to be the best and most timely means to improving education. It is at least a plan to begin to break down the isolation between professors so they can address some of the demands placed upon them.<sup>3</sup>

There is still a certain enchantment with higher

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<sup>1</sup>A. W. Astin and others, Faculty Development: In a Time of Retrenchment (New Rochelle, N.Y.: The Group for Human Development in Higher Education and Change Magazine, 1974), p. 14.

<sup>2</sup>Ibid., p. 15.

<sup>3</sup>Ibid., p. 17.

education in American society even though it has recently been shaken. There is a growing suspicion within society that education, in a time of economic stress, no longer ultimately leads to a good job and that professors enjoy a greater amount of free time than those paying their salaries. For these reasons, among others, students and society are seeking to hold professors accountable for doing a good job. These are all good reasons, Astin and others asserted, for implementing an effective faculty development program.<sup>1</sup> The main reason, however, should be to effect the quality of teaching and morale of professors and students, which in turn calls for a variety of initiatives within several stages.<sup>2</sup>

Astin and others enunciated some of these reform initiatives. Among them were: rewards for individual initiative through easement of their normal burdens for assisting novice professors; sabbatical leave to update professional skills, financial rewards and promotion; accountability, by assisting professors in defining goals, aiding in personal, confidential assessment, and teaching how to teach; assisted self-study through faculty requested outside consultants; and consultant interviews with students relating needs and goals back to faculty.<sup>3</sup> Furthermore,

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<sup>1</sup>Ibid., pp. 18-20.      <sup>2</sup>Ibid.

<sup>3</sup>Ibid., pp. 20-24.

programs on teaching including the following were incorporated.

- regular, detailed observations of and discussions about teaching by colleagues, visitors, specialists, and students;

- a widespread, disciplined sharing of knowledge about learning as an activity, based on the experience of faculty and students, the expertise of researchers, and written autobiographical accounts of learning;

- the systematic training of graduate students, as part of their normal program, in skills useful to a future professor;

- the establishment of a campus teaching institute to coordinate and assist all of these activities;

- the creation of a new contract between professors and their students that would provide various ways to certify student mastery other than requiring a teacher to grade his or her own students and would urge more elaborate faculty assessments<sup>1</sup> of student work for the sole use of each student.

Astin and others made some key recommendations for new faculty development programs. First, regular campus programs on teaching should be organized within universities and colleges, coordinated by an institute. It should be supported out of the general budget, sustained by faculty themselves and using 10 percent of their time for creating and maintaining a pedagogical campus culture primarily through direct observation and discussion of teaching techniques. Second, supervision of a teaching practicum for graduate students in the course of Ph.D. work for college teaching. Third, evaluation of teaching methods of graduate

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<sup>1</sup>Ibid., pp. 24-25.

students equivalent to scholarship assessment, ultimately resulting in a statement of mastery from said institution. Fourth, a system of confidential assessment and official certification by third parties outside the discipline should be developed. Fifth, faculty should have access to small grants for special teaching projects. Sixth, parallel with department structure could be colleague departments encouraging teaching as well as research. Seventh, development of a system for assisting in mid career changes.<sup>1</sup>

Fred Gaige, Director, Center for Professional Development at Kansas City, felt such mid career crises were the origin of most faculty dissatisfaction problems.<sup>2</sup> Beginning with those in mid career crises, with no mobility for new intellectual challenges, dissatisfaction spreads to other faculty.

Once the institution accepts the need for alternatives, its next problem is supporting it. With today's emphasis on faculty development, more grants are becoming available. However, faculty time is more at a premium. The program should fit into existing faculty time schedules, or have the power to change them. In the past, most

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<sup>1</sup>Ibid., pp. 82-83.

<sup>2</sup>Opinion expressed by F. Gaige, in an address, "Stages in Career Development of Faculty Members," at Kansas City Regional Conference on Higher Education, Kansas City, Missouri, January 22, 1977.

resistance to change has been due to lack of knowledge about how to improve. This knowledge can become an essential part of faculty development.

Bowen felt faculty development should begin with a small, well-prepared program directed at those wishing to participate. A deliberate effort should be made to incorporate highly respected individuals within the institution. It should gradually spread to include everyone within the institution.<sup>1</sup>

The next decade will not be easy for professors. Economic and social pressures will require a new level of resourcefulness. Faculty will seek to protect their economic interests in a variety of ways, including group action; but ultimately their well-being depends on support for higher education by taxpayers, potential students, and donors. Whatever self-defensive measures are required, faculty should place their main hope in programs for professional development. To the extent that faculty development thrives, colleges and universities will have more to offer the public and professors will at the same time find greater satisfaction in their work.<sup>2</sup>

Part of the answer to finding a viable program, which can fulfill the maximum number of these local goals, was found to lie in cooperative endeavors between faculty,

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<sup>1</sup>Opinion expressed by Howard Bowen, in an address, "Economic Projections and Enrollment in Private Higher Education," at Drake University, Des Moines, Iowa, February 3, 1977 (tape on file in University Faculty Development Program).

<sup>2</sup>Astin and others, op. cit., p. 86.

institutions, regional agencies, and national agencies for institutional and faculty development. The study of what other institutions are successfully producing, was an essential step to such attainment. Visitation and observation of other programs, newsletter exchange, literature study and regional conference attendance also aid in clarification of program goals.

Astin stated that more attention should also be placed on characteristics of entering freshman. In studies he had conducted (Environmental Assessment Technique, EAT), the characteristics of freshman were highly related to institutional characteristics. He felt it important to know whether student characteristics reflected in their needs were consistent with those of the institution.<sup>1</sup> This attention could have extensive effect on the retention rate and the word students spread to prospective students about the institution. Programs such as the Drake University "Recruitment Telethon",<sup>2</sup> Lehrer stated, were attempted to meet enrollment needs. Student volunteers manned phones, each contacted ten prospective high school seniors and answered questions about the institution and education in

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<sup>1</sup>A. W. Astin, "Some Characteristics of Student Bodies Entering Higher Educational Institutions," Journal of Educational Psychology, LV, No. 5 (October, 1964), 267-75.

<sup>2</sup>Lehrer, op. cit., p. 1.



general. They also informed the prospective student of such upcoming programs as sleeping bag weekends.<sup>1</sup> Lehrer observed that the purpose of these programs was to get the prospective student on campus to observe facilities and talk to students presently enrolled. Hadley, Director of Admissions at Drake University, said "the students sell the institution."<sup>2</sup> They may also severely hurt such recruitment programs if their needs don't match those expounded by the institution.

Gruabard observed that

. . . higher education took its place in a long line of other "causes"--urban blight, environmental decay, racism, poverty, and crime in the streets--that managed to command public attention for a season, but that seemed incapable of retaining the public's interest. . . . Some will say that it is simply times that are out of joint, that this is not the moment for bold educational ventures: public (and private) monies for innovation and growth are no longer available; professional and legislative resistance to major innovation is substantial; student interest in reform has declined; public apathy concerning education in general and higher education in particular has reached new proportions.<sup>3</sup>

This attitude has created an atmosphere in almost every institution to look out for its own survival, when the reverse is needed more than ever before. Cooperation, not competition among higher education's components is

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.

<sup>3</sup>Gruabard, op. cit., p. 20.

needed, supplanting the idea of administrators functioning solely as efficient fiscal crisis managers. Simultaneously, educational institutions have initiated constructive introspection. The challenge is to manage this without imprecation of those who govern in high places whether in the college, university, state, or nation.<sup>1</sup>

The challenge to education in America has become one of preserving and/or developing quality, through diversity. Too many institutions have lost sight of their real opportunities, objectives, and values by trying to emulate a few perceived prestigious models. New clienteles currently being ignored need servicing.<sup>2</sup>

Light observed that it appears that the faculty, as a cluster of professions, is the greatest shaper of higher education. Misplaced priorities of emphasis upon creation and publication of new knowledge versus effective teaching of such knowledge has far-reaching implications in education. In the professions, such as law and medicine, only a small faction of their membership is concerned with such research. They recognize their role as primarily service professions.<sup>3</sup>

Light noted that today there is an increasing demand

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<sup>1</sup>Ibid., pp. 3-4.      <sup>2</sup>Ibid., pp. 1-12.

<sup>3</sup>Light, op. cit., pp. 258-63.

that teaching count for more. Yet to make teaching a more honored and rewarded profession, more knowledge about teaching faculty and their careers is needed. The career ladder need not end at professorship attainment. Interdisciplinary programs which are stimulating to both faculty and students, in a nonthreatening manner, are needed.<sup>1</sup>

Light observed that

if institutional funds are arranged in the right way, and if such ventures in education are rewarded locally, professors would have nothing to lose and everything to gain by entering a new venture. In short, if administrations put real clout behind excellent and imaginative teaching, and keep rewarding their faculty for doing so throughout their entire career, they will get what they bargain for. It is worth a try.<sup>2</sup>

Colleges are beginning to wrestle with these institutional and faculty dilemmas. Lavaroni and Savant reported that replacing tenure with periodic review and extended appointment by faculty, students and administrators met with great success at Dominican College in San Rafael, California. The system has the freedoms for which tenure was established without its abuses. The program grew out of suggestions and alternatives proposed by the entire academic community.<sup>3</sup>

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<sup>1</sup>Ibid., p. 262.

<sup>2</sup>Ibid., p. 263.

<sup>3</sup>C. W. Lavaroni and J. J. Savant, "Replacing Tenure with Periodic Review," Phi Delta Kappan, LVIII, No. 6 (February, 1977), 499.

This new system replaces the virtually absolute and automatic mechanism of traditional tenure with scheduled reviews preceding appointments, reappointments, or promotions, to be effective for varying periods of time depending upon the rank in question and the nature of the review. According to this policy, assistant professors may receive appointments ranging from one to three years; associate professors, one to five years; and full professors, one to six years. No one receives an appointment for life or until the age of retirement. The normal professional requirements for promotion remain in effect. However, the system of extended appointment entails review and recommendation by the Committee for Professional Review--a body initiated by the new policy.

The CPR, which functions through the College Council, sets up a yearly review calendar; it examines evidence ranging from student, peer, and self-evaluations to the instructor's record of special services and accomplishments; it makes appropriate recommendations regarding reappointment, promotion, and the duration of appointments.<sup>1</sup>

To be more responsive to a wider range of needs and expectations, Jacobs observed that educational programs must become more flexible and develop certain common parameters.<sup>2</sup>

Definitions. A program is defined as a set of planned interrelated activities designed to achieve a specified goal(s) and which requires time and other resources for implementation. Program Development is defined as the process of assessing needs and developing goals; delineating and selecting alternative means to goal attainment; implementing and monitoring the best solution strategy; and comparing intended with actual

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<sup>1</sup>Ibid.

<sup>2</sup>J. Jacobs, "A Model for Program Development and Evaluation," Theory Into Practice, XIII, No. 1 (February, 1974), 15.

goal achievement. Evaluation is defined as the process of delineating, obtaining and providing relevant information to decision makers to service the decision needs inherent in program development. Evaluation is the servant of development. . .

Finally, something should be said for the relation between program development and curriculum development. Curriculum development is seen as a subset of activities in program development when the program deals directly with student performance especially in academic subject areas.<sup>1</sup>

Thomas Jefferson said that a democratic society could not survive without an educated populace.<sup>2</sup> Americans need to reflect on what their system offers in not being totally in the control of the federal government. Ikenberry observed that several of the private institutions remain among the country's most conspicuous centers of scholarship and education while providing alternatives and weathervanes to societal needs and encouraging individual personal choice. For these reasons Ikenberry asserted they should not become dependent on public support.<sup>3</sup>

Pace found in his study the "Demise of Diversity" that the small liberal arts colleges,

In measures of faculty and peer involvement, academic satisfaction, stimulating academic experiences, and meaningful campus life, the alumni and students of these colleges rate their experience one or two standard deviations above

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<sup>1</sup>Ibid., pp. 16-17.

<sup>2</sup>Ikenberry, op. cit., p. 126.

<sup>3</sup>Ibid., pp. 73-113.

the alumni and students of comparable universities. These institutions do what educators dream a college should do. They make profound differences in the people who pass through them, not only in terms of the college experience but in terms of lasting breadth. On measures of broadened literary acquaintance, awareness of different philosophies and cultures, appreciation of art, music, and drama, friendships and social development, and the ability to write and speak effectively, the liberal arts colleges come out ahead. In particular, select colleges do noticeably better than select universities. Yet these institutions are closing at a rapid rate.<sup>1</sup>

### Notable Examples

After extensive study of many faculty development programs throughout the United States through newsletter mailing lists, attendance at various programs, and review of compilations such as Erickson and Erickson's unpublished Faculty Development Conference paper<sup>2</sup> outlining 62 programs; Hodgkinson's and others Manual for Evaluation of Innovative Programs and Practices in Higher Education;<sup>3</sup> and Crow's and

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<sup>1</sup>R. Pace, "The Demise of Diversity?", Daedalus, I (Fall, 1974), 261.

<sup>2</sup>G. R. Erickson and B. L. Erickson, "Report to the Attendance of the Faculty Development Conference" (Warrington, Virginia: Arlie House, October 17-19, 1976). (Xeroxed.) Hereafter referred to as Faculty Development Conference of the Professional and Organizational Development (POD) Network in Higher Education, Kansas State University, Manhattan, Kansas.

<sup>3</sup>H. Hodgkinson and others, A Manual for Evaluation of Innovative Programs and Practices in Higher Education (Berkeley: Center for Research and Development in Higher Education, University of California, 1974).

others Faculty Development Centers in Southern Universities,<sup>1</sup>

certain common pressures for faculty development became apparent. Among the most conspicuous pressures were:

- . Leveling or declining student enrollment
- . Decreased mobility of faculty and administrators
- . High percentage of tenured faculty members who were mostly in their forties
- . A buyer's market for students with regard to educational opportunities
- . Economic crunch for universities and for students
- . The need to better prepare graduate students for jobs in higher education
- . The proclivity of students to tell it like it is, not to be awed by a teachers authority, and to bring legal action if they don't get what they pay for
- . Increased demand for accountability by parents, . . . and the public in general
- . An articulate (and often negative) press.<sup>2</sup>

Jacobs summarized the four essential stages in any complete program development, which best address these pressures. First is goal setting, premised upon the felt need for change, or problem situation. This process requires an extensive needs assessment, then deduction of priority goals. Jacobs felt that needs must meet two criteria--Are they within the institutions jurisdiction? Are they authentic? Is there a discrepancy between what is and what should be? The most difficult task becomes

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<sup>1</sup>M. L. Crow and others, Faculty Development Centers in Southern Universities (Atlanta: Southern Regional Education Board, 1976).

<sup>2</sup>Ibid., p. 3.

establishing priorities among goals. Caution should be observed in not defining more goals than can be realistically attained within the program. Constant re-evaluation of goals must occur throughout the entire time span.<sup>1</sup>

Second is program planning in which identification of alternative solutions to goal planning are undertaken, followed by a reduction of stated goals into smaller performance units. The role of representative ad hoc and advisory committees are especially valuable at this stage.<sup>2</sup>

Without established criteria, rational program selection and planning cannot occur. Examples of criteria for program selection are: correspondence of program objectives with those established in the goal setting stage; projected cost and effectiveness; time requirements; feasibility, etc. Existent programs designed to meet specified objectives should be studied first to save resources and "reinventing the wheel." It should be borne in mind that the development of new programs is time consuming and costly. Most goals dealing with conventional academic skills development probably should be pursued by selecting already packaged programs on the commercial market. If none meet the specified criteria, a new program will have to be developed.<sup>3</sup>

Third is implementation. It is vital, Jacobs continued, that one person should be designated as responsible for the program plan. Constant modifications are required,

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<sup>1</sup>Jacobs, op. cit., pp. 17-18.

<sup>2</sup>Ibid., p. 18.

<sup>3</sup>Ibid.



and the coordinator should be able to see the program in its entirety, to foresee problems, and alleviate some of them.<sup>1</sup>

The implementation stage may be viewed as consisting of two parts. First is the management and operation of the plan. Second is interim assessment of progress toward goals and objectives.<sup>2</sup>

Jacobs also noted that a carefully kept log of activities is essential for future reference. Further it may also aid in preventing repetition of mistakes. In addition logs may aid transposition to other situations.<sup>3</sup>

Fourth is what Jacobs referred to as the summative education stage.<sup>4</sup> This is the evaluation stage of the implemented program.

This determination, called summative evaluation, leads perhaps to the most crucial decision; whether to recycle the program in its implemented form or modify the program in some way to correct deficiencies, or reject the program because it failed to do the job it was intended to achieve.<sup>5</sup>

In order for this four stage model to succeed, in real and practical application, four concepts need to be understood.

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., p. 19.

<sup>4</sup>Ibid.

<sup>5</sup>Ibid.

First, the model requires some recycling loops to prior stages in the program development process. Second, the model does not require each stage to follow in logical succession from goal setting, to planning, to implementation, to summative evaluation. Third, the model could "start" at any one of the four stages, although some backing up may be necessary. Fourth, the model does not necessarily require one stage to occur at a time; two or more can be in process concurrently.<sup>1</sup>

Tyler was in general agreement with these four stages, but included satisfaction of the first three stages of Maslow's Hierarchy of Needs as essential to any development.<sup>2</sup>

Bergquist and Phillips expanded such programs to include eleven different strategies for faculty development. The eleven strategies are: training, consultation, personal and organization development, methods-promotion, instructional materials, equipment, discussion, evaluation, rewards system, career transitions, and comprehensive institutional development.<sup>3</sup>

In addition, success in these principal designs was found to hinge on several requirements. According to Jacobs, top administrative support needs to be an integral part;

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<sup>1</sup>Ibid., p. 20.

<sup>2</sup>J. M. Gottman and R. E. Clasen, Evaluation in Education: A Practitioner's Guide (Itasca, Illinois: F. E. Peacock Publishers, Inc., 1974), p. 4.

<sup>3</sup>Bergquist and Phillips, op. cit., pp. 260-66.

ad hoc and advisory committees need in-service training to be effective; the coordinator needs adequate authority; mutual trust needs to be nurtured; adequate time needs to be allowed for change to occur; manuals of the overall program should be dispensed to help all involved to understand proposed changes; adequate, relevant data needs to be assembled in a non-threatening manner; and costs need to be worked out in advance.<sup>1</sup>

Scully noted that many institutions of higher education are beginning to reconsider a curriculum core as a common starting point for students and a means of raising funds to explore change and faculty development.<sup>2</sup>

Stanford University recommended that a university-wide western culture requirement be reinstated . . . Marist College has announced plans to abandon an unstructured curriculum . . . Middlebury now requires all students to take basic courses in the humanities, the social sciences, and the natural sciences.<sup>3</sup>

Harvard has listed six characteristics of the educated man or woman, and is in the process of curricular change to implement them.

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<sup>1</sup>Jacobs, op. cit., p. 21.

<sup>2</sup>M. G. Scully, "Many Colleges Re-appraising Their Undergraduate Curricula," The Chronicle of Higher Education, XIII, No. 21 (February 7, 1977), 1.

<sup>3</sup>Ibid., pp. 1, 10.

The ability to think and write clearly.  
An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences.

An awareness of other cultures and other times.

Some understanding of, and experience in thinking about, moral and ethical problems.

Good manners and high aesthetic and moral standards.

Depth in some field of knowledge.<sup>1</sup>

Bowen said the Rummel Plan, which consisted of a series of eight courses required by all students throughout the college years, two each year for four years, produced common understanding for discussion within classes and the institution. Bowen also observed, in a broad based curriculum utilizing the Rummel Plan, that the costs of educating one student in a four credit course could be reduced from today's average of \$240 to \$202. In a limited based curriculum, he could bring the cost of educating the same student down to \$112. He defined broad based curricula as offering 570 classes; the moderate based curricula as offering 476 classes; and the limited based curricula as offering 320 classes. Bowen also found that a combination program incorporating 35 percent conventional programs, 25 percent Rummel program, 15 percent independent study, 10 percent mechanical methods, and 15 percent tutorial methods, could reduce the cost of educating the same student in a moderate based curriculum in the same four credit course from \$240

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<sup>1</sup>Ibid., p. 10.

to \$212, and in the reduced curriculum to \$164.<sup>1</sup>

As Scully observed, the laissez faire attitude may apply in economics but has no place in education.<sup>2</sup> Faculty Development Programs are attempting to fit the program to the institution.

Centra sent letters to every college and university in the United States and inquired into the existence of a faculty development and instructional program. Of the 2,600 accredited degree-granting institutions (2 year, 4 year colleges and universities) 1,783 responded. Sixty percent (1044) said they had a program. Another three to four percent said they were planning programs. Seven hundred fifty-six (70 percent) of this group responded to a four-page questionnaire concerning their program. Estimates of effectiveness of institutional wide policies or practices in development were conducted. Centra found that generally summer grants to provide, at least half salary, temporary teaching load reductions to work on new courses, or research, travel grants to refresh or update knowledge in a particular field, visiting scholars program, and travel funds to attend professional conferences were ranked as most effective

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<sup>1</sup>Opinion expressed by Howard Bowen, in an address, "Economic and Options," at Drake University, Des Moines, Iowa, February 4, 1977 (tape on file in University Faculty Development Program).

<sup>2</sup>Scully, op. cit., p. 10.

(see Table 21, Appendix A).<sup>1</sup>

An analysis or assessment of practices indicated that student ratings of instruction to help faculty improve, formal and informal assessment by colleagues for teaching or course improvement, administrative teaching and course evaluation, and self assessment were the most frequently used techniques (see Table 22, Appendix A).<sup>2</sup>

The author felt that there were four unique programs which, in combination aided in the synthesis of his model, while simultaneously satisfying all the requirements discussed thus far in this chapter.

The Faculty Development Program at the University of Wisconsin (Oshkosh) provides budget support (travel, consultants, student assistants, supplies) for well defined professional development projects in a wide range of areas. The program also provides Compensation for Additional Service (CAS) for projects done during calendar periods but outside the faculty member's load assignment. The program is administered by the Faculty Development Board (ten faculty, Grant Officer, Dean of the Graduate School, and a designee from Vice-Chancellor's Office). The program also contained a Research Board and a Curriculum Board, each with five

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<sup>1</sup>J. A. Centra, "Survey of Faculty Development Practices," Faculty Development and Evaluation in Higher Education, II, No. 3 (Fall, 1976), 2-6.

<sup>2</sup>Ibid.

faculty and three administrators.

The program consisted of four major components:

Research Component which provides support for faculty research projects in all disciplinary areas including unique faculty interests. Program proposals are evaluated according to criteria established by the Research Board. Proposals are evaluated twice each year (September and February).

Curriculum Development Component which supports faculty to engage in substantial curriculum development efforts which cannot be completed within one academic year.

In-service Component which supports faculty involvement in a wide variety of off- and on-campus professional development activities through CAS.

Academic Institutes Component which provides support for temporary academic units focusing on interdisciplinary problems and issues.<sup>1</sup>

The primary objectives of the Program are to:

1. Provide continuing opportunities for faculty to renew their intellectual vitality and further their professional growth;
2. Improve the quality and diversity of the University's academic programs and make them more accessible to learners in its service region;

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<sup>1</sup>Office of the Assistant Vice Chancellor for Academic Systems, "Faculty Development Program," (Oshkosh: University of Wisconsin-Oshkosh, August, 1976), fact sheet. (Mimeographed.)

3. Improve decision-making and organizational functioning within the University community;
4. Better utilize the institution's internal resources in efforts to improve instruction and assist faculty in their professional development.<sup>1</sup>

The Oshkosh Calendar Plan is unique in that it combines the features of two traditional plans; the four-one-four semester plan and the Colorado College Modular approach.

Two main semesters are offered, each having three modules of seven, seven, and three weeks. A summer semester of eight weeks includes two four-week modules. Courses may be offered intensively over a three-week module, less intensively over seven weeks, and in the traditional pattern over 14 weeks. . . . Included in the program is a system of continuous registration which permits students to enroll in and complete courses at various times throughout the year.

The new calendar reorganizes the faculty load dimension of the academic year to provide greater opportunities for course development university governance responsibilities, research, and other professional activities. Faculty responsibility remain the same, an annual teaching load of 24 undergraduate credits (or its equivalent) and campus-based responsibilities, other than teaching, extending over 34 weeks.<sup>2</sup>

This calendar plan for a 17 week semester is shown graphically in Figure 16.<sup>3</sup>

The Division of Instructional Development, which began at Utah State University in 1969 is committed to the

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<sup>1</sup>Ibid., p. I-1.

<sup>2</sup>R. Birnbaum, "Using the Calendar for Faculty Development," reprint from Educational Record, LVI, No. 4 (1976), 227.

<sup>3</sup>Ibid.



Faculty Load with  
Traditional Calendar

← 17 weeks →	
Development, Governance, Research, Etc. (DGR)	
12 Credit Teaching Load	

← 14 weeks →		← 3 wks →
DGR	DGR	DGR
12 Credit Teaching Load		.....

Figure 16  
Traditional and Revised Calendars

improvement of the instructional process in various departments across the campus. It is a modestly funded (Fund for the Improvement of Post-Secondary Education--FIPSE Grant) and staffed program concerned almost solely with its own institutional problems. The model for instructional development has evolved into four basic steps:

(1) Developing faculty awareness, through newsletters, seminars, and other similar activities involving the faculty at large, (2) capitalizing upon faculty initiative, primarily through small scale funding under a program of mini grants, (3) conducting fairly substantial faculty support activities, where participating faculty members are released full time for one quarter to work intensively on a project of their own choosing, and (4) working with an entire department to revise particularly important steps in the curriculum for its graduates.<sup>1</sup>

The four part instructional development program can be seen graphically as a cumulative process in Figure 17.<sup>2</sup>

It was observed by Eastmond that faculty who had been in the system for five to nine years showed the highest program awareness. Generally, strong, positive feelings were expressed by the faculty toward the program intent.<sup>3</sup>

According to Phillips, the University of Puget Sound sought to develop a comprehensive faculty development

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<sup>1</sup>J. N. Eastmond, Jr., "Instructional Development Under the Microscope Perceptions of Faculty Members," (Logan: Utah State University, June, 1975), p. 1. (Mimeographed.)

<sup>2</sup>Ibid., p. 3.

<sup>3</sup>Ibid., p. 11.

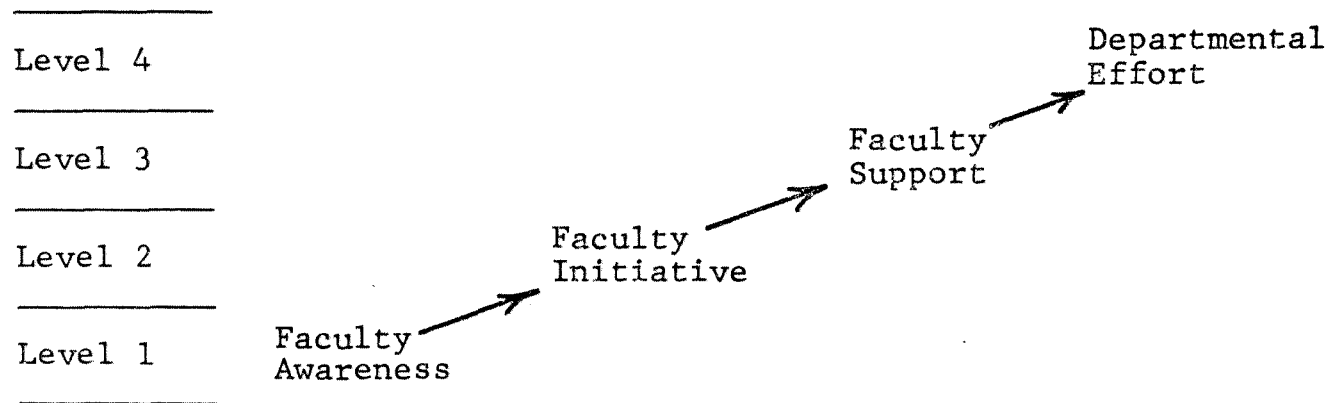


Figure 17  
Four Stages of the USU Strategy  
for Instructional Development

program through a Lilly Foundation Grant. The three major components to the program are: Departmental Consultation concerning curriculum revision, teaching methodology, and departmental organization. Second is a series voluntary workshops and seminars dealing with specific issues of teaching and learning. The lengths of these workshops vary from two hours to one week.<sup>1</sup> Workshop retreats seek to

. . . provide faculty time and seclusion for in-depth reflection of their roles as teachers, to examine their current practices, to consider various approaches to instruction, and to explore the relationship that exists between their<sup>2</sup> teaching and other aspects of their lives.

In addition, Phillips noted that the incorporation of nationally prominent faculty development authorities give strength and direction to the program. Third is a program of faculty exchange, in which pre-service preparation and post-service evaluation are incorporated. Seminars on teaching compose a large portion of such exchanges.

The Institutional Goals Inventory (IGI) was used to assess goals. All faculty, top and middle administrators, and a representative student population were sampled.<sup>3</sup> It was felt that the

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<sup>1</sup>S. R. Phillips, Faculty Development Newsletter (University of Puget Sound), October 15, 1975, p. 4.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., p.11.

. . . instrument would allow the university to assess the present state of affairs in some detail, judged the progress it has made in reaching its stated goals and objectives, and provide guidelines for future planning and implementation of its program of faculty development.<sup>1</sup>

Phillips felt it would be unrealistic to expect all faculty members to participate in all aspects of the program, however, if faculty could become involved in some phase others will become more attractive. The more involved faculty become, the more clearly they can define their own needs. Involvement of this level makes faculty development at the University of Puget Sound more broad based and effective in the classroom.<sup>2</sup>

The University of Florida Office of Instructional Resources (OIR) is unique in that it is part of one of the largest educational institutions in the United States, comprising sixteen colleges and two schools with a total enrollment of 28,000.<sup>3</sup>

The primary objectives of the OIR is to improve instruction through innovative programs implementation, experimental program encouragement, and continued support of effective existing programs. The OIR seeks to attain four major functions.

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 12.

<sup>3</sup>Jeannie Webb, "Office of Instructional Resources," (Gainesville: University of Florida, 1976), p. 20. (Mimeographed.)

- . To provide programs to faculty for the analysis and improvement of the teaching-learning process.
- . To provide to faculty consulting services and technical assistance in the design and use of instructional programs and materials.
- . To provide testing and program evaluation services to faculty and staff.
- . To perform instructional research.<sup>1</sup>

The OIR is based on two assumptions: first, it is primarily a faculty service organization; second, personal improvement results from personal innovation and experimentation.<sup>2</sup>

Some of the activities in the instructional development and improvement program of the University of Florida are mini-sabbatical programs; instructional laboratory; instructional program for faculty including the teacher assistance program and the modularized courses for faculty development; and learning laboratory and personalized learning center.<sup>3</sup>

The Office of Instructional Resources is funded by allocations from the general education budget of the university. . . .

The only formal evaluation procedures for the Office of Instructional Resources have been assessment of projects supported through the mini-sabbatical program and the compilation of attendance figures for the Office's faculty development programs. A large evaluation project is now underway in the Personalized Learning Center. No overall assessment of the effectiveness of the office has been made, but this is seen as a much needed activity.<sup>4</sup>

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 21.

<sup>3</sup>Ibid., pp. 23-24.

<sup>4</sup>Ibid., p. 24.

### Summary

Faculty and curricular development have been influenced by many forces. Definite characteristics and alternatives have emerged from the effective development programs. Among the prominent features of faculty and curricular development programs are the following.

- . Three basic models shaped the future of American higher education: The English or Oxford elitist; the Scottish or practical system; and the German or scientific model.

- . Faculty development programs reflect the influence of prominent developers, such as Taba, Getzels and Guba, Frymier, and Tyler.

- . Lecture methods dominate today's teaching methods in higher education.

- . Faculty development needs to aid professors in: diversifying methodologies; personal and professional development; obtaining student feedback to improve teaching effectiveness; conducting periodic review of instruction program and proposals for improvement; creating an environment conducive to creation of alternatives; and providing financial and moral support for constructive experimentation.

- . Teaching improvement needs to become the ultimate purpose for all faculty development programs.

- . Rewards should be an integral part of the program.

- . Adequate financial resources must be available.
- . The replacement of tenure with annual professional review has proven effective in reducing stagnation tendencies upon tenure attainment.
- . Effective faculty development programs possess the following characteristics: effective goal setting techniques; alternatives for utilizing ad hoc groups; a single coordinator responsible for execution of program goals; expeditious program implementation; effective summative evaluative system; program flexibility; an active advisory committee; good communications system; incorporation of feedback; and visible administrative support is apparent.
- . Curricula core may provide financial opportunities for experimentation.

#### FACULTY DEVELOPMENT PROGRAM EVALUATIONS

##### Historical Background

Program and curriculum evaluation in education is not new. Tyler was one of the earliest explorers of evaluation of instruction based on educational objectives and their definition, and clarification done jointly by teachers and evaluation specialists. He saw the task of development of evaluation models and question types as a task of the evaluation specialists while production and review of such questions was undertaken jointly with the faculty and



specialists participating.<sup>1</sup>

Bloom and others development of the Taxonomy of Educational Objectives became a landmark in the identification of educational objectives which fall in the cognitive domain. It classified educational objectives and provided instructional evaluation techniques appropriate for each class and subdivision.<sup>2</sup>

Weiss reported that a passage of the 1965 Elementary and Secondary Education Act contained a clause which stipulated that evaluation must be a necessary building block in the design and construction of American educational reform.<sup>3</sup>

Gage stated educational objectives could be effectively evaluated if faculties were given workshop help from specialists and time to relate them to personal situations.<sup>4</sup> Although Faculty Development is not new, certain characteristics are common in effective systems.

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<sup>1</sup>R. W. Tyler, Constructing Achievement Tests (Columbus, Ohio: Ohio State University Press, 1934).

<sup>2</sup>B. S. Bloom and others, Taxonomy of Educational Objectives (New York: Longmans and Green, 1956), passim.

<sup>3</sup>C. H. Weiss, "The Politicization of Evaluation Research," Journal of Social Issues, XXVI, No. 4 (1970), 57-68.

<sup>4</sup>N. L. Gage, Handbook of Research on Teaching, (Chicago: Rand McNally & Company, 1963), p. 390.

### Characteristics of Effective Systems

Bowen stated any instructional evaluation program should compare standards to see if any change in students occur over time; institutions should learn to work with other institutions cooperatively; public relations reporting of good and bad news to the community should become honest and regular; programs should begin on a small scale to establish techniques and communications networks, then expand slowly; programs should be incorporated into the teaching load; students who participate should receive credit for one course for honest effort. He felt this was the way to true accountability.<sup>1</sup>

No evaluation system can progress very far without adequate source information. Gage's Handbook of Research on Teaching<sup>2</sup> and Travers' follow-up Second Handbook of Research on Teaching<sup>3</sup> contain extensive bibliographies.

Nimmer found that one of the most effective ways of assessing societal needs of communities serviced by the university need not be elaborate or expensive. Post cards and brochures were found more effective than television or

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<sup>1</sup>Bowen, "Values and Dilemma in Higher Education."

<sup>2</sup>Gage, op. cit.

<sup>3</sup>R. M. W. Travers, The Second Handbook of Research on Teaching (Chicago: Rand McNally & Company, 1973).

radio, and less expensive.<sup>1</sup>

Cohen, Trent, and Rose said no evaluation of teaching can be conducted without,

. . . first defining appropriate criteria for judging teaching effectiveness; second, developing and administering the necessary assessment devices; and third, getting faculties to incorporate the procedures and act on the results.<sup>2</sup>

Herman noted that any instructional evaluation system must be based on proper planning. There must be an agreed upon definition of the term evaluation based on needs, rationale, duties, information, time, and funds.<sup>3</sup>

Herman also observed that a total staff evaluation should begin by assessing what, and how well, current practices are producing.

Such key considerations as the following need to be considered: (1) Is there a meaningful program for the selection of various categories of staff to be employed? (2) Does the staff specifically know what is expected of them? (3) Is there consensus on the purpose of evaluation? (4) Is there consensus on the methodology of evaluation? (5) Is there planned positive use in staff development of the informations gained from evaluation? and (6) Is there a felt need that evaluation is desirable and/or that current evaluative program can be improved?<sup>4</sup>

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<sup>1</sup>Nimmer, op. cit., pp. 8-9.

<sup>2</sup>A. M. Cohen, J. W. Trent, and C. Rose, "Evaluation of Teaching," Travers, op. cit., p. 1041.

<sup>3</sup>J. J. Herman, Developing an Effective School Staff Evaluation Program (West Nyak, New York: Parker Publishing Company, Inc., 1973), p. 11.

<sup>4</sup>Ibid., p. 12.

The initiating factors for such evaluation systems can vary from those developed by staff through unilateral decisions from above. They may have been initiated by administration in cooperation with faculty, feeling a need for such direction. An outside agency or expert might have been employed for a variety of reasons. There are obvious advantages and disadvantages to each method. However, the greater the participation and involvement or awareness in the decision-making process, the easier, more nonthreatening, and more effective the evaluation.

Herman noted that representative committees have been a logical solution. Committees should range in size from 10-25 for expediency of decision-making and maximum involvement. Representatives need to have a desire to serve and have the support of those they represent. The desire to serve helps overcome the problem of motivating a group into action. Serious consideration needs to be given to student and societal representation effected by the institution's presence, changes, and worth.<sup>1</sup>

Herman stated that the degree of success of any such evaluation system will be greatly tied to the quality and quantity of communications between steering committees and the institutional personnel. The distribution of minutes and other relevant decisions through an effective

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<sup>1</sup>Ibid., pp. 11-12.

communications network has proven essential. Newsletters, bulletin boards, program and high administrative memos, word of mouth, media, institutional newspapers, and any other unique and effective means should be explored and incorporated.<sup>1</sup>

The committees should know, Herman argues, precisely what their responsibilities are. This requires a thorough understanding of the programs needs, goals, objectives and means of obtaining them.<sup>2</sup>

Herman stated that the primary purpose for the existence of the Steering Committee on staff evaluation should be:

1. To review the current staff evaluation program . . . and what, if anything, needs to be done to improve the current situation.
2. To study and review staff evaluation programs of superior quality which are operative in other schools, businesses and industries; . . .
3. To review existing research in the area of staff evaluation . . .
4. To establish a philosophy to guide the development of a total, unified staff evaluation program.
5. To develop the pertinent objectives of the total . . . staff evaluation program.
6. To provide . . . an estimate of the human, material and monetary resources necessary to properly bring the total staff evaluation program to fruition.
7. To act as an advisory body . . .<sup>3</sup>

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<sup>1</sup>Ibid., pp. 11-17.

<sup>2</sup>Ibid., pp. 13-28.

<sup>3</sup>Ibid., p. 21.

The responsibility for acting as an advisory body includes yearly progress reports and final written statements on the evaluation plan including the following:

- a. A statement of philosophy and objectives in the area of staff evaluation.
- b. A complete description of the total program's mechanics . . .
- c. A complete plan for publicity releases and in-service education and job upgrading.
- d. A suggested time schedule within which . . . schools should establish the suggested staff evaluation program . . .
- e. An estimate of the staff, materials, equipment, supplies and costs that are necessary to carry on the suggested program through implementation.
- f. A listing of those elements which the committee members feel are imperative to program development. . . .<sup>1</sup>

Evaluation systems, according to Herman, might serve a single purpose or a multitude of purposes through varying techniques. He listed some of the more comprehensive reasons for conducting evaluations as: to improve instruction, to improve task performance, to select staff for future promotions, to distinguish staff assignments, to grant merit pay, to provide a basis for tenure decisions, to acquaint the individual with his responsibilities, to motivate individuals, to provide personal information to individuals regarding their strengths and weaknesses, and to provide a variety of information, concerning staff members, for administrative decisions.<sup>2</sup>

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<sup>1</sup>Ibid., p. 22.

<sup>2</sup>Ibid., pp. 25-26.

Rose observed that, with the accountability movement, certain aspects of higher education will necessarily change.

. . . the operation of higher education involves a set of mutual, interrelated functions and relationships which operate together to achieve a defined purpose: providing the students with an opportunity to learn . . . Accountability, is a system concept, and the systematic evaluation of these programs is equally as crucial as is the systematic evaluation of instructional programs. The intellectual and emotional lives of the students, as well as the well being of the faculty or administrator participants, are being influenced positively or negatively because of professional development programs.<sup>1</sup>

No one would argue that evaluation poses many problems for development programs. Among them, that high stakes may be placed in the hands of improperly trained evaluators.

Rose observed that generally only two basic dichotomized types of evaluation systems exist, the quantitative and the impressionistic. The quantitative type which accompanied the accountability movement of the 1950's and 1960's, was impersonal, lacking in clearly defined goals, but easily manipulated statistically.<sup>2</sup>

Rose asserted that a more consequential and

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<sup>1</sup>C. Rose, "Evaluation: The Misunderstood, Maligned, Misconstrued, Misused and Missing Component of Professional Development," Faculty Development and Evaluation in Higher Education, II, No. 3 (Fall, 1976), 23.

<sup>2</sup>Ibid., p. 24.

effective program is the holistic evaluation, which rests on three assumptions:

- (1) that there is a purpose for activities such as professional development and that this purpose is related to the purposes of the institutions in which it has been established and thereby, it is related to the goals of higher education;
- (2) that professional development activities are not ends in themselves, but are related (or should be) to meaningful and measurable results; and
- (3) that professional development activities are intended to result in improved faculty performance and student learning.<sup>1</sup>

Thus, the holistic evaluation, according to Rose, is sensitive to three major areas: concern for the social-psychological environment in which the program functions; for the attitudes, values, and interests of individuals; and for intended and unintended program consequences.<sup>2</sup>

The ultimate goal of program evaluation should be to improve performance, Redfern argued.

Improvement of performance is achieved in several ways: self-endeavor, helpful supervision, a stimulating learning environment, optimum quantities of learning materials, supplies, and a supportive climate. Systematic evaluation is but one means of stimulating improvement.<sup>3</sup>

Libbee, proposed a simple diagnostic teaching evaluation technique which does not depend on administrative diagnostic data. The procedure requires one hour of class

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 25.

<sup>3</sup>G. B. Redfern, How to Evaluate Teaching: A Performance Objectives Approach (Worthington, Ohio: School Management Institute, 1972), pp. 8-9.



time for administration, tabulation, and analysis. It consists essentially of giving students an eight item open-ended questionnaire for rating personal faculty traits, course content, work load, and study materials, as well as suggestions for improvement. The results are tabulated anonymously, then discussed with the instructor and students as a group. The advantages of the system lie in its ease of administration, application to many situations, and participation of students and faculty face to face. The primary disadvantages are lack of norms and inability to identify responses of particular students possessing special needs. Libbee suggests the best time for administration of the questionnaire is about mid-term, so suggestions may be incorporated into the course or program.<sup>1</sup>

Most effective evaluation systems are thus flexible, continuous, representative of the population being evaluated, based on reliable feedback and measurable objectives, adequately funded, nonthreatening, designed to aid personal faculty development, and play an integral role in change programs.

#### The Role of Evaluation in Change Programs

Evaluation is probably the most important aspect of a development program. In a liberal sense, evaluation must

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<sup>1</sup>M. Libbee, "A Simple Diagnostic Teaching Evaluation Technique," Faculty Development and Evaluation in Higher Education, II, No. 3 (Fall, 1976), 7-8.

precede the program to assess initial needs, and it must follow the program to measure change progress.

Bergquist and Phillips observed that evaluation exhibits a diversity of forms.

Any organization that wishes to change in a systematic and thoughtful manner must continually assess the discrepancy between current operations and desired outcomes. Such an assessment procedure is necessarily evaluative in nature, since values and preferences are inherent in any statement of desired outcomes. Student evaluation is probably the most commonly used method of instigating change in faculty performance. Two other sources of evaluation, by the instructor himself and by his peers, are both used more sparingly.<sup>1</sup>

According to Bergquist and Phillips, for self evaluation to be effective, the faculty member needs to see his performance as inadequate or below his personal standards. He will generally not change before experiencing some discrepancy, pain, dissonance or stress. An effective faculty development program would contain a stage in which faculty were asked to assess personal strengths, weaknesses, and areas of potential improvement. Such assessment should be done en masse to avoid isolation of an individual.<sup>2</sup> Bergquist and Phillips observed that peer evaluation is rarely observed in faculty development programs. The reluctance to develop such evaluation systems stems from

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<sup>1</sup>Bergquist and Phillips, op. cit., p. 45.

<sup>2</sup>Ibid.

time required and low levels of trust characterizing many institutions. Some encouraging methods, however, do exist, according to Bergquist and Phillips: team teaching with mutual evaluation; rotating class assignments, encouraging individuals to sit in on classes they will teach next; and development of rotating master teachers system, with reduced teaching loads to give aid where needed. Ultimately trust must be established. Interpersonal skills training can be very helpful. The proportion of organization efforts versus individual efforts can be increased. Departmental awards for good teaching and faculty review are two more examples.<sup>1</sup>

Bergquist and Phillips observed that student evaluation generally draws attention directly to instruction. When done effectively, such evaluations can produce data for valid comparisons of teaching performances. Such evaluation may also increase student-faculty interactions and indirectly improve instructional skills and student involvement. Accountability can be enhanced by student evaluation.<sup>2</sup> It has been recognized, according to Travers, that such evaluations are generally fair in that sex, age, grade point average, and grade received from the instructor had little relationship to the student's rating of professors.<sup>3</sup>

Bergquist and Phillips observed several negative

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<sup>1</sup>Ibid., pp. 45-46.

<sup>2</sup>Ibid., pp. 46-48.

<sup>3</sup>Travers, op. cit.

aspects of student evaluations. First, a defensive attitude may be developed by faculty, which can block change. This attitude can be partially eliminated through a multi-level evaluative instrument providing general, or summary, information for administrators and chairmen with specific evaluative data of individual usage. Second, questions have arisen about such data due to the types of information sought. Third, a disservice can be done to development of faculty if such evaluations are used as the only feedback to the instructor without peer and self evaluation incorporated. However, the appeal to student evaluation continues to lie in their reduced expense, student involvement, and ease of quantification.<sup>1</sup>

Bergquist and Phillips stated that improvement of the student evaluation could be accomplished in these general ways:

. . . (1) the instrument can be reduced to a minimal number of items by means of factor analysis and related statistical techniques; (2) the instrument can be designed to be minimally evaluative and maximally descriptive, using check-lists and precise situational-descriptors ("under condition X, the teacher is likely to do...: a, b, c, or d"); and (3) the instrument can be constructed so that some items can be used for tenure, salary, and promotion decisions, while other items can encourage instructional improvement. The items on the former should be evaluative and the data should be made available to department chairmen and deans; the

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<sup>1</sup>Bergquist and Phillips, op. cit., pp. 47-48.

items on the latter should be descriptive and should be made available only to the instructor.<sup>1</sup>

The primary roles of evaluation in change programs for faculty development are thus: representation of the population; reduction of the discrepancy between the present conditions and what is desired; encouragement for population participation through nonthreatening procedures; provision for reliable feedback to faculty; and acceptance by the faculty. There are many fine examples possessing these characteristics. A few of them will be described.

#### Notable Examples

Gottman and Clasen's study indicated that certain obvious factors have been overlooked in evaluation system models. They have stated that Maslow's Hierarchy of Needs (Figure 18) cannot be taken for granted, even in higher education. Certain physiological needs, security needs (salary), and love needs must be realized before any self improvement in faculty or students can be expected.<sup>2</sup> In Evaluation in Education: A Practitioner's Guide, Gottman and Clasen made extensive, practical use of Tyler's Model as a means of justifying setting objectives, achieving objectives, and evaluating educational programs. The

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<sup>1</sup>Ibid., p. 48.

<sup>2</sup>Gottman and Clasen, op. cit., p. 4.

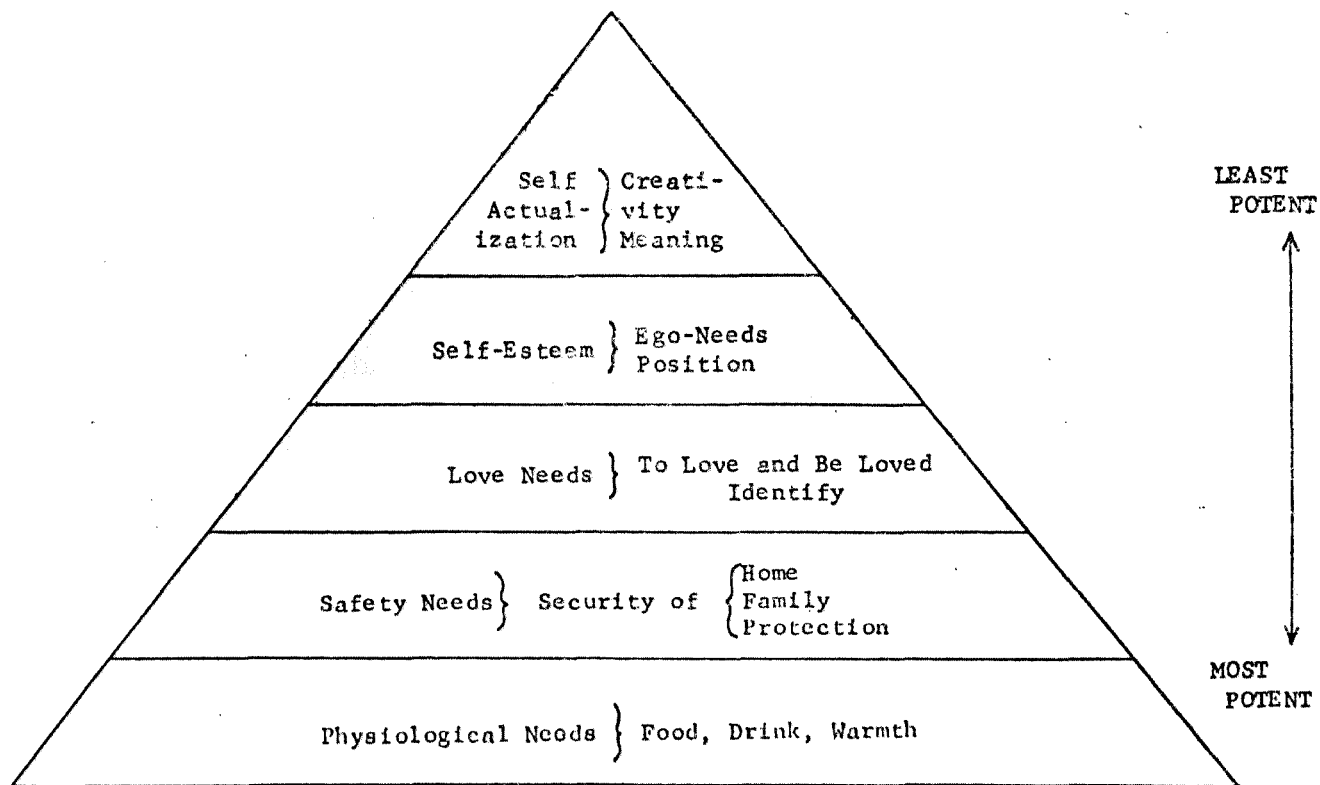


Figure 18  
Maslow's Hierarchy of Needs

model is based on four basic questions.

1. WHY? -- what needs can you cite that justify the existence of this educational program?
2. WHAT? -- what are your objectives in the program?, i.e., what objectives will the program accomplish to meet the need under WHY?
3. HOW? -- how will you have the program function to meet its objectives?
4. HOW WILL YOU KNOW? -- what kinds of information should be gathered so that you know if the HOW is meeting the WHAT for the WHY?<sup>1</sup>

The why question provides the change agent with the basics for conduction of a needs assessment. The what question aids in synthesis of program objectives from identified needs. The how questions provides the change agent with the basics of flow charting in order to achieve synthesized goals. The how will you know question provides an evaluation system coordinated with the entire program. An array of these questions can be seen in Figure 19.<sup>2</sup>

Hodgkinson and others put together a compilation of many of the most effective and innovative programs in the United States, many of which have already been discussed. Included in this manual are evaluations of many of the standardized instruments used in this faculty development program.<sup>3</sup>

Frymier and Hawn believe that unless evaluative techniques become effective "the curricula for young people

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<sup>1</sup>Ibid., p. 9.

<sup>2</sup>Ibid., p. 29.

<sup>3</sup>Hodgkinson and others, op. cit.

WHY? What needs exist?	WHAT? What are the program's objectives?	HOW? How will you accomplish these objectives?	HOW WILL YOU KNOW?
<p><u>THE TARGET POPULATION</u> has</p> <ol style="list-style-type: none"> <li>1. Higher truancy</li> <li>2. Higher disciplinary incidents</li> <li>3. Lower basic skill levels</li> <li>4. Lower class participation</li> <li>5. Lower homework completed</li> <li>6. Lower independent work</li> <li>7. Lower extra curricular participation</li> <li>8. Communication with adults poorer</li> <li>9. Communication with peers poorer</li> <li>10. Communication with parents poorer --</li> </ol> <p>than non-target population. This discrepancy should be zero (in comparison with the non-target population; i.e., the more typical students in school).</p>	<ol style="list-style-type: none"> <li>1. There will be a downward trend over time in the total number of students absent each day so that there will be no discrepancy after two years.</li> <li>4. a. The total amount of talk per 20 minute discussion period will increase over time.</li> <li>b. The total number of questions asked per 20 minute discussion period per student will increase over time.</li> </ol>	<p>4b.</p> <pre> graph TD     Start([Start]) --&gt; Step1[Put student in small, comfortable group]     Step1 --&gt; Decision{Does each student talk?}     Decision -- NO --&gt; Intervene[INTERVENE]     Intervene --&gt; Step1     Decision -- YES --&gt; Step2[As student talks, have group ask each other questions (1)]     Step2 --&gt; Step3[Teacher asks questions that stimulate small group discussion (2)]     Step3 --&gt; Step4[Group members get a task which requires them to ask questions which stimulate discussion (3)] </pre>	<p>4b. Critical point is point (X). See if student talks at all in small group. If not, then intervene.</p> <p>Also, the amount of talk and number of questions should increase over time.</p>

Figure 19  
The Blackboard Stage



in American schools will probably become more uniform but less effective."<sup>1</sup> They further believe that every effective social system reflects three phases of operation parallel to our concept of government: the intellectual phase, including planning, policy establishment, and theorizing--the legislative branch; the doing, effecting or accomplishing phase--the executive branch; evaluating, assessing, reflecting or judging phase--the judicial branch.<sup>2</sup> To be effective when such changes in values are in educational issues, the fairest and most efficient system must be incorporated. Democracy, encouraging maximum participation appears the best way to insure acceptance and permanence of created structures.

Gaff observed that

unless we can evaluate our programs and can demonstrate that they produce results in terms of better courses or better educated students, more knowledgeable, sensitive, effective, or satisfied faculty members or more effectively managed organizations, we will be out of business. And we should be. In that event, the promising faculty development movement will have been just a passing fad, as some critics already maintain.<sup>3</sup>

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<sup>1</sup>Frymier and Hawn, op. cit., p. 3.

<sup>2</sup>Ibid., p. 9.

<sup>3</sup>J. G. Gaff, "An Agenda for Cooperation in Faculty Development," Faculty Development and Evaluation in Higher Education, I, No. 1 (1975), 4.

Green and others state "the change is clear, if the educational institutions are going to survive, the 1970s must be approached as the decade of clarification and conflict resolution."<sup>1</sup> The evaluator must share the brunt of the burden.

Deming and Phillips developed the means and methodology for a systematic curriculum evaluation.

Two needs have become apparent: the development of curriculum evaluation models which facilitate far more definitive judgments than do those now popularly used; and the testing of such models, the result of which should allow the models' authors to improve them, and the users to see their unique strengths and limitations. On the basis of these perceived needs, the following model [Figure 20] was developed and tested through its application to an actual educational program.<sup>2</sup>

The system proposed by Deming and Phillips should allow a systems model developer to test his model prior to actually putting it into practice. This is accomplished by using Figure 20 and the following explanation.

Use of the descriptive categories requires a description of the program's philosophic underpinning. Assumptions, or beliefs, concerning the evaluation system should be articulated in measurable terms. Next, a

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<sup>1</sup>R. L. Green and others, "Research and the Urban School: Implications for Educational Involvement," Travers, op. cit., p. 623.

<sup>2</sup>B. S. Deming and J. A. Phillips, Jr., "Systematic Curriculum Evaluation: A Means and Methodology," Theory into Practice (TIP), XIII, No. 1 (February, 1974), 42.

Philosophic Underpinnings	Description			
Intents		Description		
Process			Description	
Product				Description
Appropriate External Criteria of Judgment				
	Philosophic Underpinnings	Intents	Process	Product

Figure 20  
Proposed Model<sup>1</sup>

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<sup>1</sup>Ibid., p. 43.

description of the intents of the program, including statements of the hypotheses evolved from intents means for comparison of intents with products should be undertaken. Next, the means for assessing what is happening, or did happen, during the programs execution should be developed. This assessment should include instruments which function as assessment tools. Next, the products should be described, and the means selected for assessing the program outcomes. Attention should be given to predicted program outcomes. Statistical analyses should be included for hypotheses testing. Next, a consistency analysis should be conducted through examination of all the matrix boxes checking for consistencies. Finally, an appropriate external criteria of judgment should be applied to draw conclusions concerning major strengths, weaknesses, and specifications of the program.<sup>1</sup>

The strength of this model as related to curriculum lies in its yielding information of value to the planners of programs in classification of the role of models in curriculum evaluation. Further, the model is intended to provide assessment in the form of description, analysis and judgment. It tells the designee whether the present model accomplishes its several intents. Repeated application should provide further information covering validity.

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<sup>1</sup>Ibid., pp. 42-44.

Evaluation models which weather the test of implementation may be valuable in many settings and multi-purposeful in application. Without such a systematic means of evaluation, the curriculum planee may become a victim of his own biases.

Bowen summarized some of the internal changes which such evaluation systems should force. They are: establish goals, which force introspection; gather information about goals--beginning with students, progressively followed through their education; administer standardized tests, check attrition rates, check values changes, (OMNIBUS Personality Test)<sup>1</sup> and allocation of student time, conduct entering-exit interviews; conduct alumni interviews concerning valuable parts of college experience; and assess impact of programs on changes in students and faculty.<sup>2</sup>

Birnbaum summarized evaluation programs succinctly, stating

Evaluating the effects of a comprehensive faculty development effort poses the same kinds of problems inherent in measuring other aspects of higher education. The evaluation program being planned will be an integral part of the new calendar and will include the effects of the faculty development effort.<sup>3</sup>

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<sup>1</sup>Astin and others, op. cit.

<sup>2</sup>Bowen, "Economics and Options," op. cit.

<sup>3</sup>Birnbaum, op. cit., p. 230.

Birnbaum proposed two ways to deal with this problem: individual evaluation and institutional evaluation. If individual changes are to be effectively evaluated, increases in the proportion of time that individuals devote to research and curriculum development activities; increases in interdisciplinary teaching; increases in positive student evaluations of teaching effectiveness; could logically be expected.<sup>1</sup>

Once institutional changes occur, Birnbaum asserts, there are two ways to measure it. Increased proposals for new courses and courses incorporating innovative teaching strategies and formats should be expected. Indirect effects may be assessed through pre- and post-administration of standardized instruments which reflect impact upon faculty and student attitudes related to university functions, teaching, concern for innovation and institutional unity.<sup>2</sup>

Initially it may appear as though faculty development programs are prohibitively expensive. However, Birnbaum states, if the alternative implications of the steady state environment is weighed, the costs of not making the investment become greater than most institutions are capable of justifying.<sup>3</sup>

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

### Summary

. Tyler, Bloom, Weiss, and Gage did much of the foundation work in evaluation systems for faculty development programs.

. Effective, evaluation systems contain provisions for comparisons over time, small scale beginnings, a felt need for evaluation, collection and analysis of valid and reliable data, input from all affected members of the client system, clearly established budgetary and clerical needs, clarification of client expectations, measurable goal statements, effective advisory committees, which know their specific responsibilities, effective communications systems, assistance for correcting weaknesses, and continuous evaluation processes.

. The Holistic, Diagnostic and Tyler's question's evaluation techniques are three effective examples for program evaluation.

. Deming and Phillips developed the means and methodology for systematic curriculum evaluation.

### SIGNIFICANCE OF THE LITERATURE

This chapter sought to review three major segments of literature: change in higher education, faculty development, and program evaluation.

It was observed that change is inevitable. However, for change in higher education to be effective and

nonthreatening, it needs to be planned, viewed as a need by the participating faculty, based on reliable data which accurately represents the faculty and society serviced, and handled by an experienced change agent or coordinator.

Some of the more effective change models studied were the Research Development and Diffusion Model, the Social Interaction Process Model, the Problem-Solver Model, and the User-Resource Linkage Model.

Three basic systems observed to have exerted extensive effects on the American system of higher education were the English or Oxford model, the Scottish or practical model, and the German or scientific model.

Through the work of such authors as Taba, Tyler, Getzels and Guba, Sergiovanni and Starratt, and Frymier, it was discovered that faculty development and curriculum development are in many ways parallel and intertwined in effective educational programs.

Four successful Faculty Development Program examples, incorporating the major aspects of the above authors were discovered at major universities in the United States. They were, The University of Wisconsin-Oshkosh Calendar Plan, the Division of Instructional Development at Utah State University, the University of Puget Sound Program, and the Florida Office of Instructional Resources Program.

The major Faculty Development Program evaluation systems were based on work by Bloom, Weiss, Tyler, Bowen,



Herman, Redfern, Bergquist and Phillips, and Gaff. The effective programs developed by these authors were found to agree in the need for program evaluation systems to contain provisions for comparisons over time, small scale beginnings, a faculty-felt need for evaluation, valid and reliable data, clear goal statements expressed in measurable terms, an effective advisory committee representative of the faculty, and effective communications.

It appears that a great deal of information has been generated in the supportive areas related to faculty development, however, no integrated programs possessing all the above characteristics in one implementation package were found. This compilation of literature should serve the function for baseline development of institutional faculty development programs.

### Chapter 3

#### THE DRAKE UNIVERSITY EXPERIENCE AS A CASE STUDY

This chapter will seek to show the advantage to using an independent, medium-sized institution to develop a faculty development model.

Drake University is a medium-sized institution of higher education. It is a comprehensive, private university located in a midwestern, urban setting, with a campus covering about 100 acres, a professional staff of 317 and student enrollment of about 6000.

It is characterized by its strong liberal arts college, professional schools, and graduate programs. It has historically played an important role in this region in providing pre-professional and professional educational opportunities to students from Iowa and contiguous states.

Although the several colleges are substantially autonomous in development of their curriculum, they operate within the philosophy of the University which seeks to provide to the student an education which incorporates entry level skills for the job market, the theoretical and conceptual knowledge necessary for continued growth as an individual and as a professional, and an awareness of values to assist the student in her/his activities as a person and as a profession.<sup>1</sup>

Drake University is classified as a "comprehensive

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<sup>1</sup>Mildred Steele, "A Report for the North Central Association of Colleges and Secondary Schools, Vol. 1," (Des Moines, Iowa: Drake University, November, 1976), Abstract. (Mimeographed.) Hereafter referred to as Drake University Profiles 1976-1977, "Report for the North Central Association of Colleges and Secondary Schools."

University I,"<sup>1</sup> in the Carnegie typology of institutions of higher education. This means it is

. . . an institution with a college of liberal arts, at least two professional schools, and an enrollment of 2,500 or over. Now, in addition, a comprehensive university is one which has limited doctoral programs or none.<sup>2</sup>

Though they have never been completely defined, the following characteristics also appear to typify such comprehensive institutions.

. . . (1) faculty and learning resources characteristic of a research university, but focused upon undergraduate and M.A. level students; (2) unusual opportunities for interaction between the liberal arts and the professional students with the benefits of a better understanding of society on the part of young professionals and a better understanding of professional education by young liberal arts graduates; (3) close relations and interactions between the several colleges, their professional accrediting agencies, and the appropriate external constituencies.<sup>3</sup>

#### CHANGE PRESSURES

Drake University, like most private institutions, is heavily tuition dependent (see Table 23, Appendix A) and competition for students with state subsidized institutions is keen.<sup>4</sup> It also is primarily a teaching institution (see Table 24, Appendix A) devoting an above

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<sup>1</sup>Ibid., p. 2.2.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., pp. 2.21d-2.21e.

<sup>4</sup>Ibid., p. 2.21b.

average percentage of general expenditures to instruction.<sup>1</sup>

Economic pressures are seen as requiring Drake University to increase the student:faculty ratio from 16:1 in 1976 to 20:1 by 1980.<sup>2</sup>

Capital needs at Drake have undergone substantial analysis and the original plans of the Centennial Development Program have been modified to meet anticipated requirements over the next 10 years or more. Major factors influencing the redesign of the physical plant plan include: the change from enrollment growth to enrollment decline; the increasing burden of maintenance costs upon the operation budget by greatly expanded campus; and, continuing assessment of the University's ability to generate capital funds--particularly in the light of dramatically increased operational needs. Drake's capital needs, therefore, encompass refurbishment/rennovation projects, limited construction of additional facilities, purchase of property, better equipment of academic programs and providing resources of anticipated special projects.<sup>3</sup>

The plateau in student enrollment (see Table 3, Appendix A), places strains on private institutions, such as Drake University, which is acutely dependent on tuition. As reported by Garson, the enrollment situation does not appear promising in the future, with most Iowa counties reporting declines in secondary school enrollments. The

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<sup>1</sup>Ibid., p. 2.21j.

<sup>2</sup>Committee on Status of Profession, "Drake University Faculty Development Program, a Proposal to the Northwest Area Foundation," March 30, 1976, p. 1.

<sup>3</sup>Steele, op. cit., p. 7.11c.

reduction can be seen graphically in Figure 21.<sup>1</sup> With 65% of Drake University's freshmen students coming from between 101-500 miles from the campus,<sup>2</sup> the resulting smaller pool of secondary school graduates could affect academic programs.

From Figure 22 it may be observed that Drake University's enrollment has already declined to a plateau. The possibility of further declines could change the nature of the institution.<sup>3</sup>

Among the most conspicuous pressures on institutions, such as Drake University, the following were identified.

. Roark and Winkler reported, direct student loans, which could greatly aid private institutions such as Drake University, appear to have a questionable future.<sup>4</sup> Additional financial problems for private institutions, could make subsidized institutions appear more appealing economically.

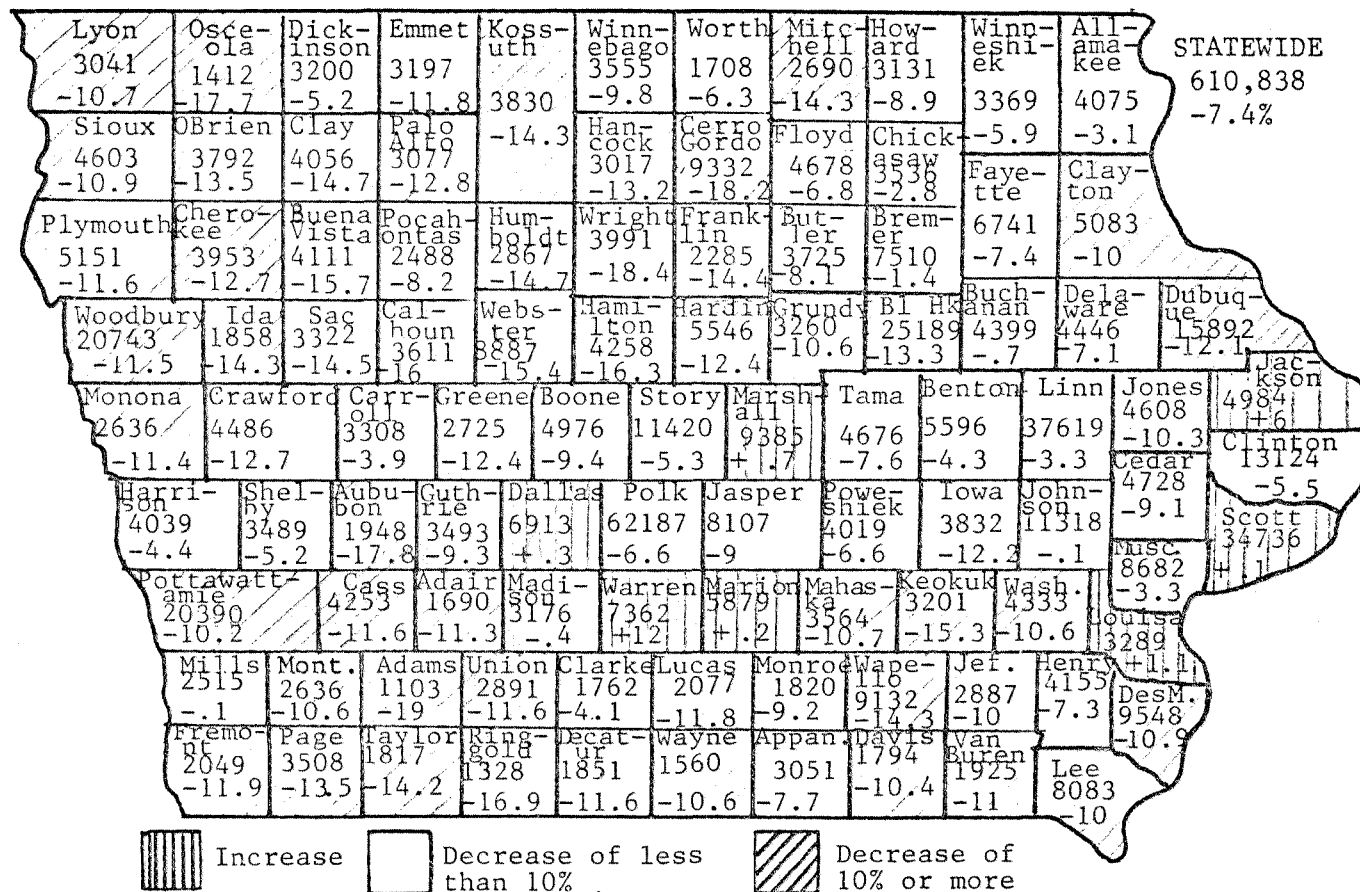
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<sup>1</sup>A. Garson, "Enrollment Decline Hits Iowa's Schools," Des Moines Sunday Register, October 24, 1976, p. 8A.

<sup>2</sup>The Student Information Form (Los Angeles: American Council on Education), conducted by Drake University, Fall, 1975.

<sup>3</sup>Office of the Registrar, Drake University, Des Moines, Iowa.

<sup>4</sup>A. C. Roarck and K. J. Winkler, "House Subcommittees Approve \$3.6 Billion for Education," The Chronicle of Higher Education, XIV, No. 2 (March 7, 1977), 13.



(1975-76) enrollment, with percentage from 1969-1970)

Figure 21

Public School Enrollment 1969-1975



Figure 22

Drake University Enrollment from 1960-1976

. An inflationary economy has produced dramatic changes in higher education maintenance and operation costs (see Table 11, Appendix A), placing increased financial burdens upon private institutions such as Drake University.<sup>1</sup>

. The rising wave of unionism as seen in Table 25 (Appendix A), reflects some of the general faculty dissatisfaction and has compounded problems for educational institutions.<sup>2</sup>

. There has been increased pressure for tenure across the country (see Table 26, Appendix A). At Drake University, both tenure and mean faculty age have been rising (Table 2).

. The decreasing amounts of donations to private universities and colleges (Figure 23) may reflect society's changing attitude toward education.<sup>3</sup> For Drake University, specifically, declines in relation to today's economic inflation could alter the nature of the institution (Figure 24).

A number of possible solutions are being explored to alleviate some of the strain on today's higher educational institutions, especially private, or independent, institutions.

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<sup>1</sup>Corbin Gwaltney, The Chronicle of Higher Education Desk Book 1976-77 (Washington, D.C.: Editorial Projects for Education, Inc., 1976), p. 116.

<sup>2</sup>"Faculty Unionization," The Chronicle of Higher Education XIV, No. 2 (March 7, 1977), 2.

<sup>3</sup>Gwaltney, op. cit., p. 159.



Table 2

Drake University Professional  
Staff Trends 1970-1976

	Faculty/ Administrators Mean Age <sup>1</sup>	Standard Deviation <sup>1</sup>	Faculty/ Administrators % Tenure
1969-1970	N.A.*	N.A.*	45.5 <sup>2</sup>
1970-1971	N.A.*	N.A.*	46.0 <sup>2</sup>
1971-1972	N.A.*	N.A.*	48.4 <sup>2</sup>
1972-1973	N.A.*	N.A.*	N.A.*
1973-1974	42.9	11.5	66.5 <sup>1</sup>
1974-1975	43.4	11.2	68.6 <sup>1</sup>
1975-1976	43.1	10.9	76.3 <sup>1</sup>
1976-1977	43.5	11.1	81.5 <sup>1</sup>

\*Not available.

<sup>1</sup>Dial Computer Center, Data Base, Drake University,  
Des Moines, Iowa.

<sup>2</sup>Office of the Vice President of Academic Administra-  
tion, Drake University, Des Moines, Iowa.

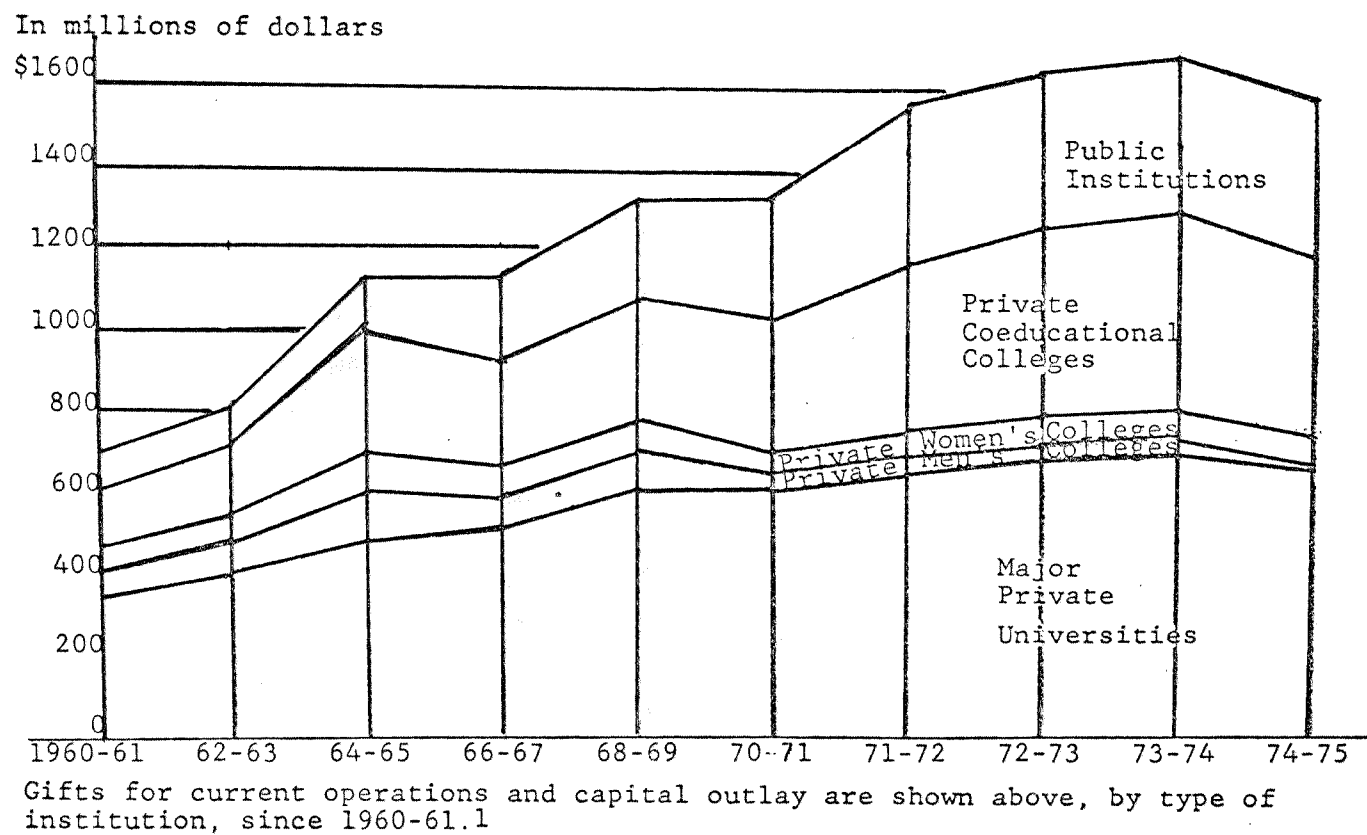


Figure 23  
Patterns of Giving to Higher Education<sup>1</sup>

<sup>1</sup>Gwaltney, op. cit., p. 159.

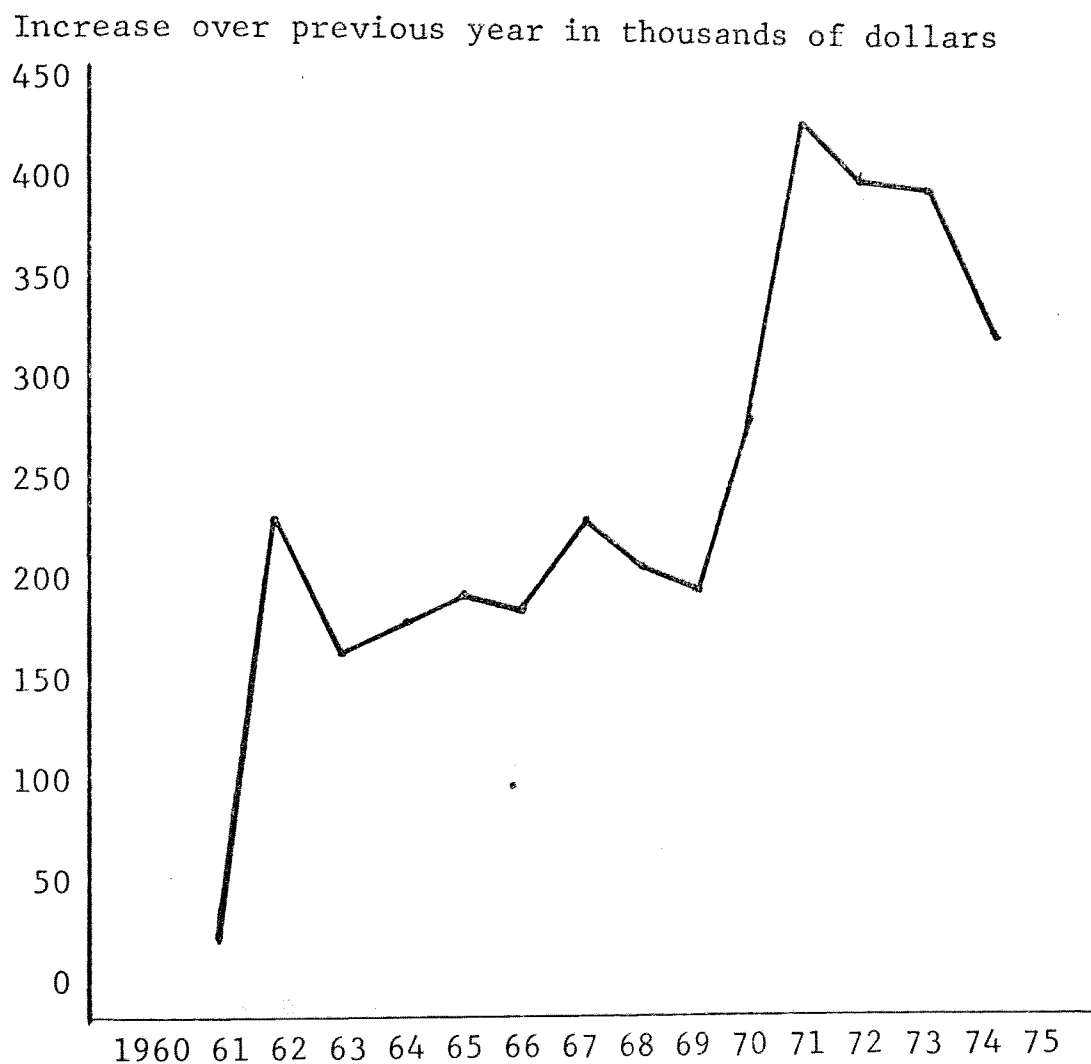


Figure 24

Drake University Endowment and Annuity  
Fund Balances for Years Ended May 31<sup>1</sup>

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<sup>1</sup>Office of Vice President Business and Finance,  
Drake University, Des Moines, Iowa.

. Van Dyne observed that realignment plans of such systems as the City University of New York and the state universities of New York may indirectly aid some private institutions, by spending funds more equally about the state. Better utilization of state monies would ultimately improve education for its students.<sup>1</sup>

. The New Jersey plan being studied seeks to provide more money to students, who may then attend the college of their choice. This plan may also aid private institutions.<sup>2</sup>

. Hamilton observed that the pressure in Iowa, as reflected in the Third Century Report, indicates pressure to aid the nontraditional learner.<sup>3</sup> (See Table 16, Appendix A.)

The combination of the pressures described above indicate the need to encourage institutions, such as Drake University to re-examine their directions and purposes to assure a continuation of its contribution to society.

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<sup>1</sup>L. Van Dyne, "Realign CUNY, SUNY in two State Systems, New York is Urged," The Chronicle of Higher Education, XIV, No. 2 (March 7, 1977), 4-5.

<sup>2</sup>"Give Students More Money, Colleges Less, N.J. Urged," The Chronicle of Higher Education, XIII, No. 18 (January 17, 1977), 2.

<sup>3</sup>I. B. Hamilton, The Third Century: Post Secondary Planning for the Nontraditional Learner (Princeton: Educational Testing Service, 1976), pp. 16-17.

## FACULTY DEVELOPMENT PROGRAM BACKGROUND

The Drake University faculty development program was officially begun in the Fall of 1976. It originated from

. . . an outgrowth of 30 months of study by the Drake Committee on the Status of the Profession--a select, ad hoc, University Senate committee. The committee's primary charge is to "review the faculty personnel system . . . and recommend policies and procedures to achieve institutional vitality, flexibility and stability."<sup>1</sup>

Among the special tasks of this committee are insuring professional competency and faculty responsibility; promoting teaching improvement; promoting and professional activities, including faculty, and career development.<sup>2</sup>

This specific proposal was drafted by an ad hoc committee appointed by the President of the University. The committee was chaired by the Vice President for Academic Administration and included three members of the Committee on the Status of the Profession, the Vice President for Institutional Development, the Assistant to the President, and the Executive Director of Admissions.<sup>3</sup>

A three year grant totaling \$160,000 was presented to Drake by the Northwest Area Foundation of St. Paul, Minnesota. The guidelines to be followed for obtaining such funds are described completely in Appendix E.

The Drake Faculty Development Program was summarized

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<sup>1</sup>Committee on Status of Profession, op. cit., p. 6.

<sup>2</sup>Ibid., pp. 6-7.

<sup>3</sup>Ibid., p. 7.

in the following statement of the problem. The entire problem statement is described in Appendix E.

#### A. The Problem

Continued professional growth by faculty is particularly important for a university such as Drake, with its strong commitment to quality teaching and close contact between faculty and students. Due to economic and enrollment pressures, Drake has set a goal of increasing the student/faculty ratio from 16 to 1 at present to 20 to 1 in 1980. This change contemplates stabilizing the faculty at a reduced number in the future. At the same time, meeting institutional responsibilities to present students, as well as serving future students, became a critical problem for both the individual faculty member and the university at large. . . . The current danger of faculty stagnation must be alleviated by a systematic program to stimulate faculty development within a changing and more demanding University context.<sup>1</sup>

The major goals of the program are outlined here, however, the goals in their entirety are described in Appendix E.

Goal I: To enhance the professional skills, vitality, productivity, and innovativeness of the faculty, thereby improving student learning opportunities. . . .

Goal II: To improve the learning process by interrelating student needs and expectations with the teaching and advising methods of faculty.<sup>2</sup>

The program's coordinator's background is in curriculum development, and the program thus leans toward curricular models. The strong influence of such authors as Taba, Tyler, Sergiovanni and Starratt, Getzels and Guba,

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<sup>1</sup>Ibid., p. 1.

<sup>2</sup>Ibid., p. 4.

and Frymier and Hawn are reflected in the program's design. The development of representative Faculty Advisory Committees, extensive personal coordinator and faculty interaction, and emphasis on voluntary participation of faculty members due to interest rather than pressure, are examples of the curricular development influence.

This author's project also reflects some similar curricular development influences as will be observed in the next section.

#### FACULTY DEVELOPMENT PROJECT

From the study of literature and parallel programs certain principles concerning faculty development emerged from the Drake University Program.

It is inevitable that change will occur. Logical change, however, needs to be planned and anticipated. For this to occur a knowledgeable, effective change agent needs to be identified. Although administrative power is deemed unnecessary in effective programs, the coordinator may be given sufficient authority to utilize it when and where necessary. The responsibilities of the coordinator need to be well understood by the institution and the coordinator. A pilot assessment of faculty and institutional needs may be conducted to identify efficient methodologies and packets of support and resistance. Adequate resources need to be secured in order to achieve proposed goals from

the pilot study. Working space, conveniently, accessible and relatively conspicuous to all client members needs to be secured. Research associate and efficient clerical help need to be identified early in the program. An effective needs assessment, including values as well as cognitive data, is needed to identify change areas. Such an assessment should include a thorough study of the literature pertaining to such programs, visitation to exemplary programs at other institutions, consultation with experts in the field, and assured representation from all segments of the faculty population. The faculty should see a need for such change. Change needs to be initiated incrementally to reduce anxiety and opposition. The proposed change should be viewed as realistic, and generally understood by the faculty. A log or itinerary needs to be kept and adhered to as closely as possible to reduce possible bureaucratic delays.

An effective system for synthesizing attainable and measurable goals from identified needs may then be developed. An effective Faculty Advisory Committee (FAC) representing all sections of the University community, radicals and conservatives included, is essential at this stage. It may be desirable to give the group adequate time to work together as a unit for the coordinator to familiarize them with the program and to develop a system for efficient operation. Ad hoc groups within the FAC or the University community have been effective in special purpose projects.



Top level administrative support needs to become apparent to all faculty members affected.

An efficient communications system needs to be developed to assure information transmission and a feedback route from the faculty.

In faculty development programs, goals should seek generally to aid faculty in diversifying methodologies, increasing personal and professional developments, obtaining student feedback to improve teaching effectiveness, conducting confidential periodic review of the instructional program and proposals for improvement, creating a non-threatening environment conducive to creation and/or exploration of alternatives, and providing financial and moral support for constructive, well organized and researched experimentation.

The procedures for achieving identified goals, need to be developed. Adequate advertisement of the institutional, college, and personal level need and goals should be made available to the faculty. Guidelines and qualitative and quantitative merit assessment methods may then be specified by the coordinator and advisory committee and communicated to faculty. Personal interviews with colleges, departments and faculty proposing projects (workshops, seminars, consultations, stipends, etc.) can then be conducted for clarification development of a nonthreatening environment, and encouragement of viable programs.

Communications become critical at this point in the Faculty Development Program. In addition to personal interviews, a newsletter devoted specifically to the program might be developed, which is sufficiently unique to command attention, concise enough to fit on one page (two sides), and distributed regularly to all faculty and staff. Frequent personal contacts need to be encouraged, in person or by phone, to help assure adequate communications with the faculty, and reliable, personal feedback. Ideas from all sections of the institutional faculty helps assure the development of alternatives, acceptance by those affected, and longevity of the program.

A nonthreatening evaluation system needs to be established which contains: baseline empirical and values data for comparisons over time; small scale beginnings to establish methodologies; a felt need for evaluation by the client institution, college, or individual; ideas from all affected members; and provisions for continuous assessment of individual projects within the program in a personalized, yet parallel manner.

All program evaluation instruments need to be personalized, clear, concise, anonymous, easily tabulated for quantitative assessment. In addition, they may include provisions for open-ended comments and/or criticisms. With all of these program generalities in mind, the first specific step in the Drake University Program was to do a needs

assessment for the project.

### Needs Assessment

Needs were established to justify the reasons for the program's existence. Needs were assessed following an extensive study of the literature related to change, faculty development and evaluation; personal observation of some effective, exemplary programs (University of Wisconsin-Oshkosh, Kansas City Regional Consortium on Higher Education-KCRCHE) already in existence; establishing an exchange mailing list with programs at twenty other institutions; participation in workshops and consultations with experts in the field; interviews with college departments and individuals. Each step was discussed with the Faculty Advisory Committee for suggestions and approval. In addition, extensive search and analysis of previous studies conducted at Drake University were explored for validity and applicability, and faculty response to the program. The Institutional Goals Inventory was also conducted in the Fall of 1976 for more current perceptions of both students and faculty. From these needs, goals were developed specifying what objectives were necessary in order to meet the identified needs.

The data and instruments utilized in the development of the needs and goals for the baseline study are discussed in the following section.

Data gathering and analysis. Data were collected for this study from a variety of sources. The Baseline data, from which needs were assessed were assembled from:

1. Enrollment data from the Office of the Registrar.
2. The American Council on Education (ACE) Study conducted in the Fall of 1975.
3. The Hill Advisory Unit Study which ran from Fall, 1973 - Spring, 1975.
4. The College and University Environment Scales (CUES) Pilot test run in Spring of 1976.
5. The National Center for Higher Education Management Systems (NCHEMS).
6. The Institutional Goals Inventory (IGI) conducted in the Spring of 1974.
7. Drake University enrollment statistics from the Office of the Registrar figures, such as those in Figure 22 are fairly typical of today's situation in higher education in the United States. They point to the need for change in certain specific areas if Drake University is to remain an effective educational contributor to the community and the country.

The ACE study norms are based on a survey of 314,000 freshmen from 562 universities and colleges. Students responded to the Student Information Form (SIF) revised annually to reflect changing concerns of the academic

community. The instrument serves two functions: to obtain student perceptions data from longitudinal research and to obtain standard descriptive and normative data for general information. It is designed to elicit a wide range of biographic, demographic, secondary school background, career plans, educational aspirations, financial arrangements, and current attitudes. Seven hundred eighty freshmen were sampled in the Fall of 1975. From that data, Table 3<sup>1</sup> was constructed to aid in need assessment.

Table 4 contains the opinions of Drake University freshmen in 1975 concerning a variety of topics.

It may be inferred from these opinions that Drake University students are not particularly liberal, seek involvement, have defined aspirations and objectives, are empathetic, and seek more than simple pragmatism.

The Hill Advisory Unit study was used to identify "exit prone" freshmen using high school grade point average, ACT, and SAT scores. The project was initiated in the Fall of 1973 and was in effect for two years. Each of the 180 freshmen identified as "exit prone" was assigned an advisor by the academic dean. The selected faculty participated in a humanistic training program to increase their effectiveness as advisors. Each advisor and advisee met each two

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<sup>1</sup>The Student Information Form, op. cit.

<sup>2</sup>Ibid.

Table 3  
 Characteristics of Drake Freshmen  
 Identified from 1975 ACE Study

	Percent of	
	Male	Female
Entered Drake at age 18	75	75
Caucasians	95	90
Took the SAT	75	68
Took the ACT	88	91
Modal high school grade average B+	18	22
Live in residence	86	95
Aspired only to Bachelor's degrees at Drake	62	73
Jewish	16	15
Catholic	27	29
Political liberals	43	32
Chose Drake as first choice due to good academic reputation	83	88
Modal parental income in excess of \$40,000 annually	30	28
Mothers were high school graduates	32	32
Live 101-500 miles from Drake	65	68

Table 4

Drake University Student Opinions  
Identified from 1975 ACE Study<sup>1</sup>

	Percent*of	
	Male	Female
Government not controlling pollution	85.2	86.6
Government not protecting consumer	73.0	71.9
Government should help private colleges	76.3	80.9
Need more grants, fewer loans	89.1	83.8
Discourage large families	69.6	56.2
Sex ok if people like each other	72.3	38.8
Women should get job equality	87.9	92.0
Young more idealistic than old	73.3	65.9
Students help evaluate faculty	75.4	78.6
Use same degree standard for all	74.0	75.2
Federal government should discourage energy use	80.2	83.6
Chances are good student will:		
Get a Bachelor's degree	80.5	82.2
Find job in preferred field	70.0	53.3

\*Incorporate only those opinions to which at least 70% of a student segment responded positively.

<sup>1</sup>Ibid.

Table 4 (Continued)

	Percent of	
	Male	Female
Important Objectives:		
Be an authority in my field	73.1	72.9
Help others in difficulty	60.1	69.7
Develop philosophy of life	66.3	71.4



weeks to discuss problems. From Figure 25<sup>1</sup> it appears that the technique was successful, and that some of the advisory techniques have carried over, as may be seen from the retention rate in 1976. It was also observed that a direct proportional relationship existed between the grade point average and probability of retention. In addition, it was observed that, the longer a student was retained into the sophomore year, the less became his probability of dropping out.

The College and University Environment Scales (CUES II) norms are based on 15,395 students from 100 institutions in eight categories. Students respond to 160 true/false items on eight scales: practicality, community, awareness, propriety, scholarship, campus morale, quality of teaching, and faculty-student relationships.<sup>2</sup> Although the Spring 1975 Drake sample of 44 randomly selected freshmen, upper classmen, and transitional students was too small to draw any conclusions, it did serve as a pilot study for methodologies development. CUES II has proven to be convenient and valid at other institutions for providing faculty,

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<sup>1</sup>Office of Admissions, Hill Advisory Unit Study  
(Des Moines: Drake University, October 25, 1974), p. 1.  
(Mimeographed.)

<sup>2</sup>College and University Environment Scales  
(Princeton, New Jersey: Institutional Research Program for  
Higher Education--Educational Testing Services, conducted  
by Drake University, Spring, 1975).

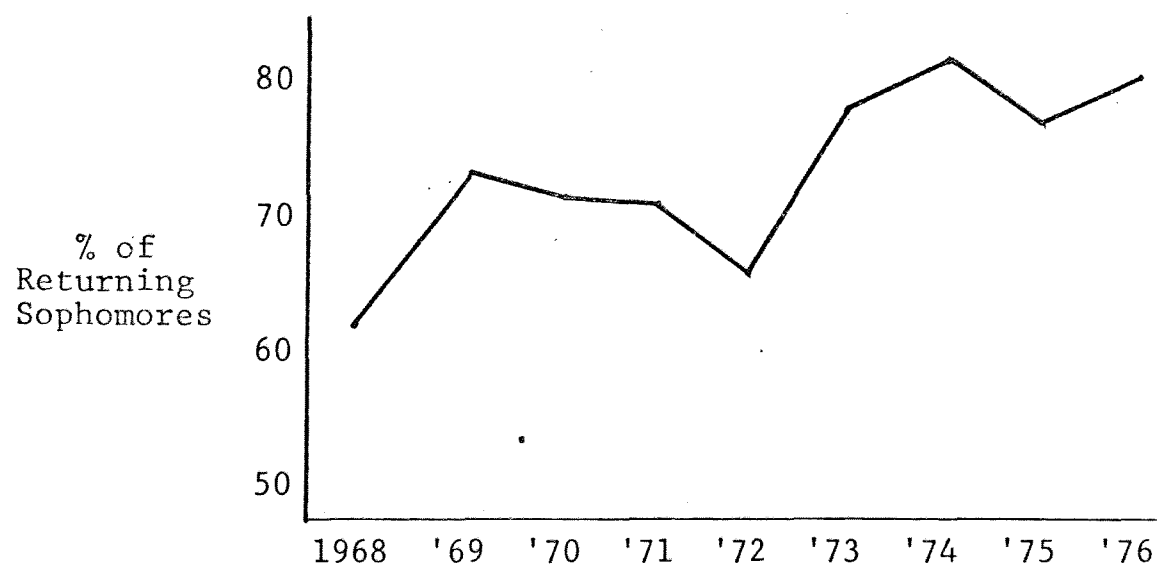


Figure 25

Hill Advisory Unit Study on Retention

administration, and student groups with materials for constructing a realistic profile of the institution's environment as seen through the eyes of the respondent. CUES II has also been proven valid by Educational Testing Services (ETS) in accurately assessing college and university environments. It is the plan to incorporate it into Drake University's Faculty Development Program in Year 2.

In 1974, the Higher Education Outcomes Measures Identification Study (OMIS) from the National Center for Higher Management Systems (NCHEMS), was refined by college presidents, academic affairs administrators, student affairs administrators, budget and finance administrators, state level planners, and state legislators. Its purpose was to aid the institution in determining; current status, performance assessment and the impacts they have, educational directions to pursue, accountability to funding agencies, student dissatisfactions, and community impact.<sup>1</sup>

The OMIS-NCHEMS instrument grew out of a 1972 Ford Foundation sponsored survey of 385 participants from diverse backgrounds utilizing the Delphi technique. Participants ranged from congressmen, to students, to educational press members, and 19 other professions between. The study

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<sup>1</sup>S. Micek and W. Arney, The Higher Education Outcomes Measures Identification Study (Boulder: Western Interstate Commission for Higher Education-WICHE, November, 1974), pp. 1-10.

attempted to forecast, through 118 change statements, general trends in higher education for the next 5-15 years.<sup>1</sup>

The 1975 Student Outcomes Questionnaire which resulted from the OMIS-NCHEMS study centers about five items to which students respond on a Likert Scale. They also address each item on how much this institution contributed to their progress in each area, and how important the progress was to them. The five areas items are: intellectual growth; social growth; aesthetic and cultural growth; educational growth; vocational and professional growth; and personal growth.

The Spring 1976 survey of 439 graduating Drake seniors responses to the NCHEMS are shown in Table 5.<sup>2</sup>

A more useful representation of the students attitudes to faculty and deans was ascertained from the breakdown of students by major field. Due to the size of the samples in some of the cells, however, caution must be exercised in interpretation. Such information is on file in the Faculty Development Office for respective college utilization but is not reported in this study.

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<sup>1</sup>V. Huckfeldt, A Forecast of Changes in Post-secondary Education (Boulder: Western Interstate Commission for Higher Education, 1972), pp. v-vi.

<sup>2</sup>National Center for Higher Education Management Systems (Boulder: Western Interstate Commission for Higher Education-WICHE), conducted by Drake University, Spring, 1976.

Table 5

Goal Area Discrepancies as Perceived  
by 439 Drake Seniors Identified  
from 1976 NCHEMS Study

Item	% students feel Drake contributed much or very much to:	% students who felt this was of much or very much importance to them:
Intellectual growth	69.5	88.7
Social growth	59.4	92.7
Aesthetic and cultural growth	29.6	61.4
Educational growth	74.6	86.7
Vocational & profes- sional growth	58.4	89.3
Personal growth	66.3	95.0

The OMIS-NCHEMS study did indicate significant need for growth in social, vocational and professional, and personal dimensions. In the area of intellectual and educational growth, Drake University appears to be doing an adequate job. In the area of cultural growth, students did not seem to express a great interest, although those concerned expressed the need for improvement.

The Institutional Goals Inventory (IGI),<sup>1</sup> developed

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<sup>1</sup>Institutional Goals Inventory (Princeton, New Jersey: Educational Testing Services), conducted by Drake University Spring 1974 and Fall 1976.

by Educational Testing Services (ETS), was designed to identify respondent's perceptions of the degree to which an institution is reaching toward a specified set of goals and the degree to which they feel it should be reaching toward them. The instrument consists of a questionnaire composed of 90 goal statements (20 goal areas) in three broad categories (see Figure 29, Appendix B).<sup>1</sup>

In interpreting the results, the higher the "is" goal area mean, the greater the importance the goal is seen as presently having on the campus compared with other goals. The higher the "should be" mean, the more importance the goal should have in the eyes of the respondent group.<sup>2</sup>

The greater the discrepancy between the is and the should be, the greater the gap between what is and what should be in the eyes of the respondents. A (+) sign indicates the should be is greater than the is. An analysis of the data suggests possible priorities for institutional change. A graphical representation of such data summaries is available from Educational Testing Services indicating means and discrepancies. An example is shown in Figure 30 (see Appendix B).<sup>3</sup> Such profile charts are especially

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<sup>1</sup>Institutional Goals Inventory: Summary Data Report for Drake University (Princeton, New Jersey: Educational Testing Services College and University Programs, March, 1977).

<sup>2</sup>Institutional Goals Inventory, op. cit., p. 6.

<sup>3</sup>Institutional Goals Inventory: Summary Data Report for Drake University, op. cit.

valuable for colleges and departments in isolating areas of needed change. The IGI was mailed to a random sample of undergraduate students and faculty in the Spring of 1974. A return of 129 students and 169 faculty was obtained.

The instrument was again administered in the Fall of 1976, but this time the classroom of each college. Significantly representative samples were obtained from each college concerning faculty, and for students in the Colleges of Business Administration, Education, Fine Arts, Journalism, Law, and Pharmacy. The College of Liberal Arts was sampled at a later date and will not be included in this study.

Table 6 shows a comparison of the two goal areas by is and should be discrepancies for faculty and students at Drake University. Areas being well serviced by the institution can be observed as well as areas neglected.

Table 7 shows the results of the Fall 1976 ranking of is/should be goal discrepancies of the entire sample of 867 for comparison and baseline needs assessment. Certain similarities exist between these ranking and those of 1974 such as a need for greater emphasis in the areas of: individual personal development, intellectual orientation, intellectual/aesthetic environment, humanism/altruism, and innovation.

Information collected for each college (not displayed here) will be distributed to each individual college for their personal use.

Table 6

Is/Should Be Discrepancies Rank Ordered, Students/Faculty, Spring 1974

Goal Area	Student	Discrepancy	Goal Area	Faculty	Discrepancy
Individual Personal Dev.		+1.60	Intellectual Orientation		+1.40
Humanism/Altruism		+1.23	Intell./Aesthetic Environ.		+1.19
Intellectual Orientation		+1.15	Humanism/Altruism		+0.95
Intell./Aesthetic Environ.		+1.11	Individual Personal Dev.		+0.91
Vocational Preparation		+1.06	Community		+0.89
Innovation		+1.01	Innovation		+0.80
Community		+0.99	Cultural/Aesthetic Awareness		+0.79
Social Criticism/Activism		+0.97	Academic Development		+0.73
Off-Campus Learning		+0.92	Vocational Preparation		+0.72
Democratic Governance		+0.89	Social Criticism/Activism		+0.70
Public Service		+0.86	Research		+0.69
Freedom		+0.73	Public Service		+0.66
Social Egalitarianism		+0.70	Meeting Local Needs		+0.59
Research		+0.64	Democratic Governance		+0.59
Advanced Training		+0.62	Advanced Training		+0.47
Cultural/Aesthetic Awareness		+0.60	Freedom		+0.44
Meeting Local Needs		+0.59	Accountability/Efficiency		+0.41
Accountability/Efficiency		+0.59	Off-Campus Learning		+0.39
Traditional Religiousness		+0.44	Social Egalitarianism		+0.31
Academic Development		+0.42	Traditional Religiousness		+0.18



Table 7

Is/Should Be Discrepancies Rank Ordered for the Entire  
Sample of 867 Fall 1976, (Includes  
Students/Faculty/Administrators)

Goal Area	Discrepancy
Individual Personal Development	+1.19
Intellectual Orientation	+1.12
Community	+1.03
Intellectual Aesthetic Environment	+1.03
Humanism/Altruism	+0.94
Innovation	+0.87
Vocational Preparation	+0.83
Democratic Governance	+0.82
Public Service	+0.74
Social Criticism/Activism	+0.70
Accountability/Efficiency	+0.65
Cultural/Aesthetic Awareness	+0.61
Research	+0.61
Freedom	+0.56
Advanced Training	+0.55
Off-Campus Training	+0.55
Meeting Local Needs	+0.52
Academic Development	+0.50
Social Egalitarianism	+0.43
Traditional Religiousness	+0.36

In addition, The Third Century: Post Secondary Planning for the Nontraditional Learner, an Iowa based study of indicating trends away from traditional students in higher education, was incorporated to help clarify project needs.

Upon completion of the representative needs assessment, the next step was to synthesize the project goals based on these needs.

Summary. From all the previous sources, the following needs were synthesized and ranked by university, college, and personal level. They were then organized systematically by the Faculty Development Program coordinator and this researcher as follows:

Faculty perceived University needs: Northwest Area Foundation guidelines; student enrollment; tuition reduction; student retention; student demographic diversity; preparation for decreasing enrollment; direct student loans to aid private higher education. From the literature and Drake University Data Bank, the following needs also emerged: faculty tenure alternatives; endowments; unity of purpose for university goals (sense of community); and sensitivity to societal pressures.

College needs: academic teaching excellence; faculty/student relationships; intellectual growth; social growth; vocational and professional growth; personal growth;

innovation; awareness of new developments within professions; unique personal qualities among faculty, supporting college goals; cultural growth; and cooperative programs beyond disciplines.

Individual needs: academic teaching excellence; skills in academic teaching; faculty/student relationships; intellectual growth; social growth; vocational and professional growth; personal growth; innovation; cultural growth; time for acquiring new research methodology; climate for establishing self as scholar; and climate for individual personal development.

### Goal Synthesis

The Faculty Development Coordinator, Faculty Advisory Committee, and Researcher then established priorities in the list and identified the following needs as best justifying the program's existence. Next the goals, or objectives, were expanded to meet these needs (Table 8). Once the goals were established, the next step was to design alternative procedures to achieve the goals.

### Procedures for Goals Achievement

Following the needs assessment and goal identification, a system for achieving the goals was developed. A Newsletter was also begun, devoted solely to the Faculty Development Program. Guidelines and financial awards were announced in the Newsletter Spectrum and distributed to all

Table 8  
Synthesized Needs and Goals<sup>1</sup>

	Needs	Goals
University	Meet Northwest Area Foundation guidelines	Acceptance of Faculty Development Program
	Academic teaching excellence	Maintain students perception of Drake's image of academic excellence
		Maintain special professional/vocational programs
	Skills in academic teaching	Develop sensitivity to identified student needs
	Student retention	Increase student retention through counseling (faculty/student interaction)
		Encourage innovation within University goals
	Unity of purpose for University goals (sense of Community)	Provide post-disciplinary opportunities for study, research, scholarship
		Augment opportunities being reduced through Drake's diminishing purchasing powers for travel, replacement, research
College	Awareness of new developments within professions	Maintain faculty intellectual orientation

<sup>1</sup>p. Dyer and J. Gerlovich, "Needs, Goals, Goals Achievement, and Evaluation Designs," a Working Paper for the Drake University Faculty Development Program (Des Moines, Iowa: Drake University, November 20, 1976). (Xeroxed.)

Table 8 (Continued)

		Needs	Goals
Individual		Unique personal qualities among faculty supporting college goals	Encourage faculty innovation within college goals  Maintain special professional/vocational programs
		Cultural growth	Increase growth in awareness and appreciation of the literature, music and other arts  Increase intellectual/cultural environment
		Social growth	Increase students' social growth through understanding of other people & their own views: experiences in relating to others
		Vocational preparation	Increase students' vocational/professional growth through preparation in traditional & emerging areas  Increase interaction with community
		Cooperative programs beyond disciplines	Increase post-disciplinary interaction
		Time for acquiring new research methodology	Provide training & support groups for individuals wishing to renew old, or learn new skills
		Climate for establishing self as scholar	Provide opportunities for individuals or groups to engage in advanced study, scholarship, research
		Climate for individual personal development	Provide practice in skills needed for personal development; behavior styles

faculty and administrators (see Figures 31 and 32, Appendix C). Personal interviews with college departments and individuals were conducted to interpret needs, goals and opportunities.

It was decided that faculty should be encouraged to initiate a proportion of the projects (workshops, seminars, stipends, consultations, etc.) meeting the identified needs and goals.

### Faculty Projects

In order for faculty initiated projects proposed to the Faculty Advisory Committee to be approved for funding, a system for qualitative and quantitative assessment of the program's satisfaction of the identified needs and goals was established. The Advisory Committee Recommendation Form (Figure 33, Appendix C) was developed based on a modification of Doxiadis' "Desirability-Feasibility Grid for consideration of alternatives"<sup>1</sup> whose validity and reliability had already been tested. The grid was adapted to educational settings by Dyer and Prentice.<sup>2</sup>

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<sup>1</sup>C. Doxiadis, "The Desirability-Feasibility Grid for the Consideration of Alternatives," Athens Center of Ekistics, The World Society of Ekistics Conference on Education, Document B, No. 13, July, 1971, p. 8.

<sup>2</sup>P. Dyer and M. Prentice, "Planning Educational Future," The Educational Forum, XXXIX, No. 4 (May, 1975), 479-483.

The simple checklist yields data which can be easily quantified. On the checklist there is also an area for comments, endorsements, and possible alternatives.

To keep sight of the entire program a project proposals log (Figure 34, Appendix C) was developed. This chart facilitated the disposition of all projects being considered and remaining to be considered. In addition, the chart contained the following projects data: the date received by the Faculty Development Office, the author, the theme of the project, and the date it was sent to the Advisory Committee. The chart also helped reduce the amount of paper work required to manage such quantities of information. The Cost to F.D.P. column--Faculty Development Program--enabled guidelines to be observed and flexibility to be extended where needed. It also greatly facilitated bookkeeping. The Recommendation Received column was a tabulation kept of each of the Faculty Advisory Committee's action on each project. It was recommended that a ratio score (the actual votes cast by each voting member/the maximum possible of 1p for each voting member) of 0.70 was to be attained for project funding. A simple majority (5 of the 9 voting members) was all that was required for voting. If a member was not able to attend a meeting he could still cast his vote on specific projects to be considered at meetings. All proposals were customarily forwarded to the Faculty Advisory Committee members one week

before a scheduled meeting for voting on projects. Under other considerations, if the Advisory Committee decided to defer a proposed project, for further clarification it would be so noted here, and the date the proposer was to personally defend his proposal before the committee would be noted. All proposers could request meetings before the Faculty Advisory Committee for clarification of their proposal. Under disposition, was stated the committee's final action on the project: accept, defer, or reject.

In addition, a levels/needs and goals area Project Matrix was developed (Figure 35, Appendix C). The purpose of this form was to help keep the entire projects portion of the program in perspective and balance. As projects were approved they were inserted into the matrix. At a glance, it was possible to see areas being neglected and those being emphasized.

Campus communications. Communications is an essential part of any Faculty Development Program. To help assure sufficient regular space for publication of information related to the program, a specialized distinctive letter was developed and distributed regularly to all faculty and administrators. Working with the professional staff from the Office of University Relations, a well balanced and concise Newsletter--SPECTRUM (Figures 36, 37 and 38, Appendix C), news of the Drake Faculty Development Program, was



developed. The name chosen was to depict the wide range of the program.

SPECTRUM was used to announce the initiation of the program to the faculty, identify program needs and goals, announce university wide speaking consultants, report progress on project awards, and interpret new program areas as they emerged in the program. In addition, SPECTRUM was sent to twenty other institutions of higher education on an exchange of information basis.

Evaluation. Following their completion, all funded projects were assessed for their effectiveness in meeting their stated goals. After extensive review of the literature, it was decided that a modified Likert<sup>1</sup> and Thurston<sup>2</sup> Scale would be most effective in such evaluations. The instrument (Figure 39, Appendix C) is clear, concise, quantifiable and the system had already been extensively studied for validity and reliability. Qualitative additions were made possible by the insertion of a comments section following each item rated giving the instrument greater range and acceptance.

It will be noted that the first three evaluation

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<sup>1</sup>G. Murphy and R. Likert, Public Opinion and the Individual (New York: Harper & Brothers, 1938).

<sup>2</sup>W. J. Good and P. K. Hatt, Methods in Social Research (New York: McGraw Hill, 1952), pp. 270-6.

instruments are not consistent. The first one utilized a 10 point scale, but it was later realized that no undecided-choice was available to the respondent. The second instrument more closely approached the Likert model, except that the zero point still gave no undecided choice. The third instrument was found to best satisfy all needs and was utilized from that point forward in all remaining project evaluations. The comments from the individual instruments were very helpful, and will be summarized in the next section to add values information.

Results. The results of the areas and goals and levels satisfied by the projects accepted to date are shown in Figure 35, Appendix C.

The first project was the Alexander Technique workshop, conducted by the College of Fine Arts, in December 1976. It was proposed by a member of the College of Fine Arts with the following objectives: (a) to develop knowledge about the Alexander technique of voice improvement and the Alexander technique of physical movement as tied to voice improvement; and (b) to develop skill in using the technique itself, and teaching the technique to students. Miss Marjorie Barstow of Lincoln, Nebraska, who had been teaching the technique for 35 years, conducted the three day workshops for faculty and students. Fifteen faculty and approximately 100 students actively participated in the

program and received personalized help. The total qualitative and quantitative results are shown in Figure 41, Appendix D.

The second project conducted was the Seminar in Higher Education I. It was the initial university-wide seminar of the Faculty Development Program to the general faculty. It was proposed by the Faculty Development Coordinator and an ad hoc committee. Dr. Howard Bowen, Chancellor Emeritus of the Claremont University Center, conducted a two-day program, consisting of a university level opening address on Values and Dilemmas in Higher Education. Ninety-five of 317 faculty members and administrators attended this session, even though it occurred during the late afternoon of a normal Thursday class schedule. Also scheduled were four small group sessions with administrators, the Faculty Advisory Committee, and individuals selected by college deans representing most departments. A total of 138 individuals attended these sessions, however, due to overlap approximately 40 different individuals actively participated. The total qualitative and quantitative results are shown in Figure 42, Appendix D.

The third project funded was the speech communications requisition for an outside consultant to assess curriculum revisions which the department had initiated in the past few years. Donald Cushman, Professor of Speech Communications of Michigan State University, spent two days

consulting with staff, attending classes, and studying syllabi to make valid assessments of the program. The total qualitative and quantitative results are shown in Figure 43, Appendix D. The quantitative results of the consultant are shown in Figure 44, Appendix D. The correlation between the means of the faculty and consultant are shown in Figure 45, Appendix D.

The fourth project funded was the Teaching Qualitative Methods in the Social Sciences workshop. This two day project proposed by members of the Social Science faculty emphasized teaching qualitative research methods as taught by Jacqueline Wiseman, Professor of Sociology at the University of California at San Diego. In addition, the program dealt with strategies and problems in teaching qualitative methods and the use of such methods in the study of social deviance. The program utilized large open sessions and small interpersonal groups sessions between faculty and consultant. The total qualitative and quantitative results are shown in Figure 46 of Appendix D.

The fifth and sixth projects concern assertive training proposed by the College of Continuing Education. Sections were conducted separately for male and female faculty in four consecutive two-hour sessions. The project training involved four basic procedures: (1) learning the difference between assertion, aggression, passivity, and politeness; (2) identifying and accepting personal rights as well

as the rights of others; (3) reducing blocks to assertive behavior; and (4) practicing assertive responses. The program was conducted by two Drake University staff members, both experienced leaders of assertiveness training with business, secondary schools and colleges. To increase necessary interaction, the number of participants was to be limited to approximately 10. At least two additional sessions are being requested by the faculty. The total qualitative and quantitative results are shown in Figures 47 and 48 in Appendix D.

The seventh funded project was proposed by a member of the English Department to determine to what extent the National Council of Teachers of English (N.C.T.E.) position, namely students' rights to their own language, is valid at Drake and to develop teaching strategies for implementation of the results into the Freshman English classes. The program ran for two days and centered about seminars and individual conferences with consultants Lou Kelly (the University of Iowa), W. R. Winteroud (University of Southern California), and John Butler (George Peabody College of Teacher Education). Five objectives were sought: (1) to develop knowledge about the N.C.T.E. resolution "The Student's Right to Their Own Language" and the "Back to the Basics" movement; (2) to develop understanding of the relationship between an individual and his language and the forces acting upon him; (3) to develop skill in teaching

language in Freshman English; (4) to develop attitudes toward dialects of English, particularly Edited Standard English and the so-called "Community" dialects; and (5) to develop values for dealing positively with students' dialects. The total qualitative and quantitative results are shown in Figure 49, Appendix D.

At this writing seven of the projects were completed. However, a number of other projects have been funded and will be completed by September 1977. The total projects' results are shown in Table 9. The individual project breakdowns, showing need level for which the project was designed, the number of participants, the number of evaluation forms analyzed are shown in Table 10.

Table 9

Total Projects Results (as of April 1977)

Number of Proposals	Number Funded	Number of Active Participants (Faculty/Administration)
30	12	175

All information concerning these projects and other university-wide instruments have been stored in closed files in the Dial Computer Center for future access.

Table 10  
Results of Funded Projects (as of April 1977)

Name	Project Needs Level	Number of Participants	Number of Evaluation Forms Processed
Alexander Technique	College	115 <sup>a</sup>	13
Higher Education Seminar I	University	150 <sup>b</sup>	20
Speech Communication Curriculum Review	Department	5	4
Teaching Qualitative Methods in the Social Sciences	Department	50 <sup>b</sup>	12
Assertive Training for Men	University	9 <sup>c</sup>	3
Assertive Training for Women	University	8 <sup>c</sup>	8
Students' Right to Their Own Language	Department	30	15

<sup>a</sup>Number of participants included students, however, they were not evaluated in this program.

<sup>b</sup>Only small, personal group sections were evaluated.

<sup>c</sup>Number of participants limited by consultant due to interaction required.

### Summary

This section summarized the effective qualitative aspects of the faculty development funded projects.

. From all projects it was observed that small group sessions were very effective following large introductory sessions.

. Those projects initiated by faculty, fulfilling an unique departmental or college need were most effective.

. Personal skills improvement was an area where greater emphasis is needed and most satisfaction is derived.

. Outside consulting appears effective in developing and evaluating skills and processes.

. Faculty participation in projects is consistent and growing.

. Face to face interaction between faculty members (across disciplines) was viewed as positive and helpful.

. Consultants were effective catalysts to change, however faculty now seek ways to implement suggestions and recommendations.

. Teaching the non-traditional student is a widespread concern among faculty and administrators.

. Follow-up programs were viewed by almost all as being useful.

. If faculty development is a priority need, time, that does not conflict with classes, or other duties, needs



to be made available when all faculty and administrators can attend university level programs.

- . Consultants helped in identifying and clarifying strengths and weaknesses in programs.

- . Faculty were receptive to personal evaluative methods.

- . Consultants confirm Drake has a strong teaching staff who are committed to their work.

Upon referring to the Project Matrix (Figure 35, Appendix C), it becomes apparent that many of the identified goals (Table 8) are being well handled for so young a program. The goal of project acceptance appears well satisfied judging from the number of projects proposed (30) in the first semester.

At the University level, Higher Education Seminars such as the Howard Bowen program helped make the faculty aware that the program existed, helped clarify certain universal goals and concerns of higher education, and facilitated faculty communicating across disciplines.

The computers in instruction program planned for June, 1977, will take representative volunteers from Drake University to Michigan State University to learn how to make the best use of the excellent computers facilities available at Drake University in teaching and evaluation in higher education. Again the number of faculty interested in attending this project exceeds funds budgeted for this

project.

Visitation by members of the Faculty Advisory Committee (representing all colleges in the University) to the University of Wisconsin at Oshkosh and Kansas City Regional Council on Higher Education (KRCHE) brought back information which has already aided in clarification and facilitation of goals achievement in this program. Some examples from the Oshkosh Program are first, there needs to be a separation of the Office of Faculty Development responsibilities into assessment, implementation and evaluation; second, better use of the institution's internal resources might be explored for application at Drake University; and third, flexible scheduling might be explored. Examples proven effective at KRCHE were first, faculty rewards system and use of internal resources; and second, the value of a consortium of institutions attacking common problems was shown.

The qualitative methods in the social sciences proposal addressed primarily the college level goals of maintaining faculty intellectual orientation, maintaining special professional/vocational programs, increasing interaction within the community, and increasing sensitivity to societal needs.

The proposed law teaching project addressed to the College of Law will attempt to improve the teaching techniques of the entire College of Law faculty. Faculty, in the

professions are becoming aware of Drake University's strength as a teaching institution and are seeking aid in improving their techniques. This project may represent the student-perceived need for the professions to improve teaching methodologies. It may also reflect the goal of seeking innovation in generally traditional areas. Furthermore, the increased student vocational/professional growth may be improved through increased teaching effectiveness of the professions. The project was endorsed by the entire Law faculty and will consist of sending two representatives to a seminar training program to learn new approaches in teaching law. Upon their return they will instruct the remaining Law faculty in such methodologies. Thus, another goal, that of seeking to increase the availability of travel money and registration fees, not currently handled by Drake University's decreasing allocation for such items, is also being satisfied.

The workshop on teaching Freshman Composition satisfied goals at the department level. Among the goals addressed were the maintenance of special profession and vocational programs. These goals accomplished by the faculty seeking clarification of the needs of its students in professional areas, then seeking curricular changes to achieve them. It also addressed the goal of increasing interaction with the community, through interaction with the press concerning clarification of such discord

centered about language disputes. On the personal level it provided the means of attaining the goal of renewing old skills or learning new ones.

The Alexander Technique workshop addressed the goal of refining old skills or learning new ones also. It also satisfied another goal of providing an effective way to practice skills needed for personal development and behavior styles. It encouraged faculty/student interaction, increased student vocational/professional growth in the fine arts, through skill improvement.

The curriculum review of the speech communications department project, used a well known consultant to assess progress from an outside source. A statistical analysis (t-test and P-statistic) of the evaluation responses indicated that Dr. Cushman and the speech communications faculty were in general agreement concerning the revised curriculum's needs, objectives, strengths and weaknesses, and the faculty's reception to innovation. (See Figure 45, Appendix D.) It also provided review of skills needed for personal development. It encouraged student/faculty interaction. Most of all it provided information on faculty innovation, while re-emphasizing the fact that Drake does have an excellent, concerned teaching staff.

The assertive training seminars provided the means of attaining the goal of developing personal skills and behavior styles. It also encouraged the crossing of

disciplines and interaction of faculty across the university.

Faculty involvement has exceeded the 50 percent level sought for this year. The need for change appears to have been realized, and realistic projects are being developed to attain them. The general faculty, realizing their strength lies in being an effective teaching institution, have devoted most of their project efforts to maintaining and/or improving this integral Drake Faculty Development Program goal. Generally, the faculty have sought personal, departmental or college improvement and innovation through development of personal skills and strengths or refining them.

Certain areas of the program at this working have yet to receive attention, such as the student needs and concerns. However, this is a very young program and the projects proposed by the Drake faculty have exceeded the expectations time-line in quality, number, and diversity.

The Drake University faculty appear sensitive to the need for change, and realize the Faculty Development Program is a means of attaining it especially at the personal, departmental, and college level.

From the summary evidence reported in the appendices, it may be concluded that Drake University projects aspect have been achieving many of its stated goals well ahead of most other institutions' programs in this stage of their

development.

The projects, however important, are only one aspect of the total Faculty Development Program. Responding to a charge by the Vice President Academic Administration Office, the faculty development staff and Advisory Committee have been developing an Integrated Program for Professional and Disciplinary Development (IPDD) to be proposed by the end of three years. An overview of this proposal is shown in Figure 40, Appendix C. The figure shows the current program in the solid line box, the areas currently being expanded in the dotted line box, and the eventual tentative program.

It is anticipated that the proposed program will eventually be headed by a board with subgroups in Research, Curriculum Development, Instructional Development, and Post-disciplinary Institutes. Evaluation would be a continuous process.

## Chapter 4

### A PROPOSED FACULTY DEVELOPMENT MODEL

The purpose of this study was to develop a model for faculty development in higher education. In doing so, it also recorded the decisions and programs of the beginning year of the three-year Drake University Faculty Development Program. Through collection and analysis of extensive quantities of literature, data, interviews, and project analyses, this study provided the historical record upon which to continue the second and third years of the program. The study will also aid in providing continuity to the program between the first and second years, should new staff be included in the program.

The newly developed model consists of three integral parts: a task analysis and timetable for a three year program, a rationale for instituting a faculty development program from a needs assessment, and the paradigm for change and evaluation in faculty development.

#### TASK ANALYSIS AND TIMELINE FOR A THREE-YEAR PROGRAM

The task analysis and timeline provides a fluid schedule for completing critical tasks simultaneously with a limited staff. It provides a convenient method for task assignments, and preparation for future events as well as a log of those completed. An example of such a timeline

appears in Figure 26, which was part of the Drake University Faculty Development Program. This timeline was proven to the author to be one of the most important items incorporated in understanding the entire scope of such a program.

#### OUTLINE FOR INSTITUTING A FACULTY DEVELOPMENT PROGRAM FROM A NEEDS ASSESSMENT

The outline for instituting a faculty development program from a needs assessment portion of the model can become as simple or complex as the designer and program demands. Figure 27 is an example used in the Drake University program. As the title implies the most critical portion of the instrument is an effective needs assessment. From the footnotes under the needs assessment, it may be observed that a variety of sources were incorporated into this baseline data bank.

Following the needs assessment the staff and Faculty Advisory Committee established priorities and limited these to a manageable number. From these critical needs, the goals, or objectives were synthesized. These goals were communicated to the faculty through a specific periodical devoted to the program, with responses encouraged.

Proposals from the faculty provided the means of obtaining a variety of possible suggested solutions to specific problems housed within the broadly defined goals.



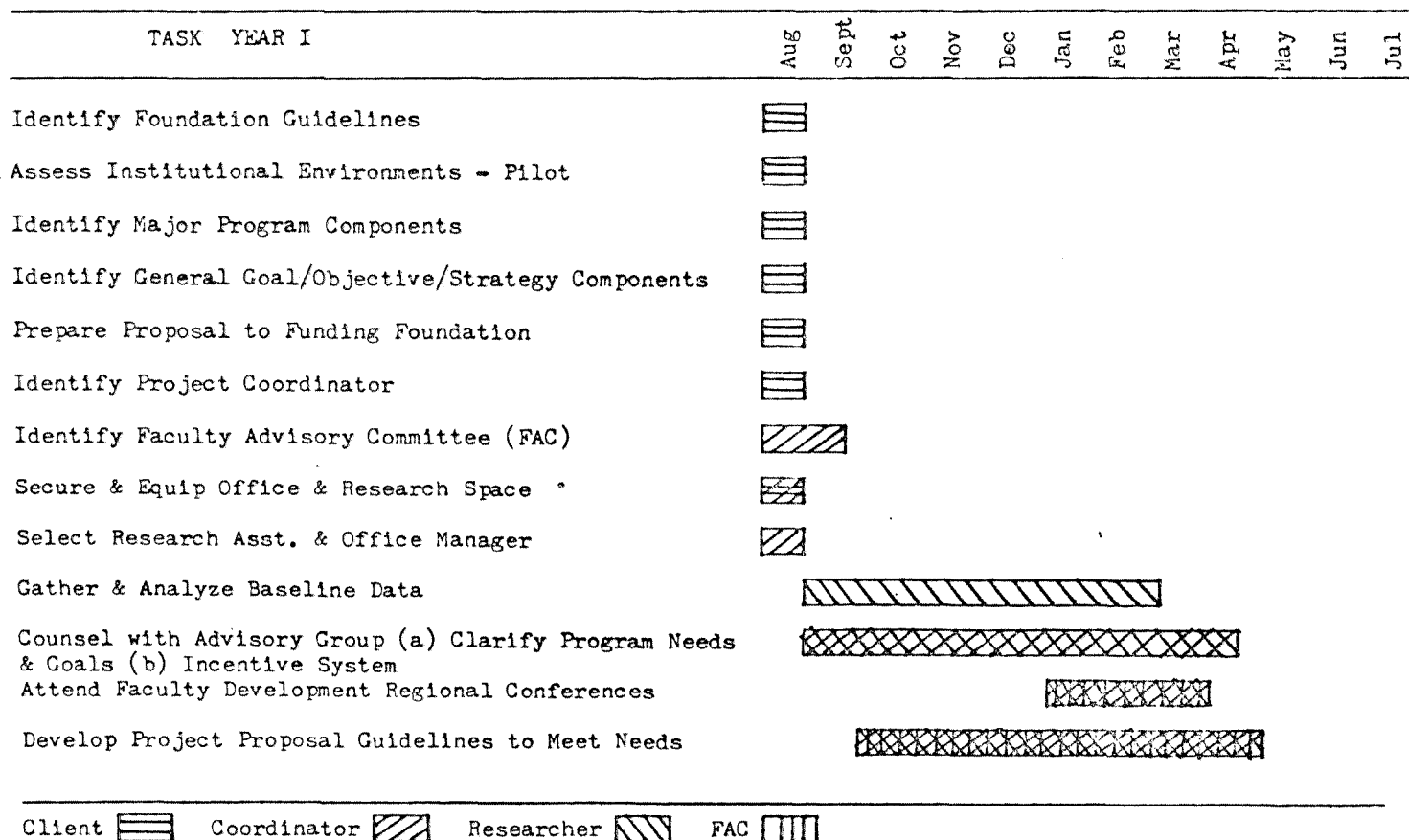


Figure 26

# Task Analysis and Timeline for a Three Year Program<sup>1</sup>

<sup>1</sup>M. Prentice, "Timeline for a Three Year Program," Working Paper for the Committee on Status of Profession (Des Moines, Iowa: Drake University, Spring, 1976).

Figure 26 (Continued)

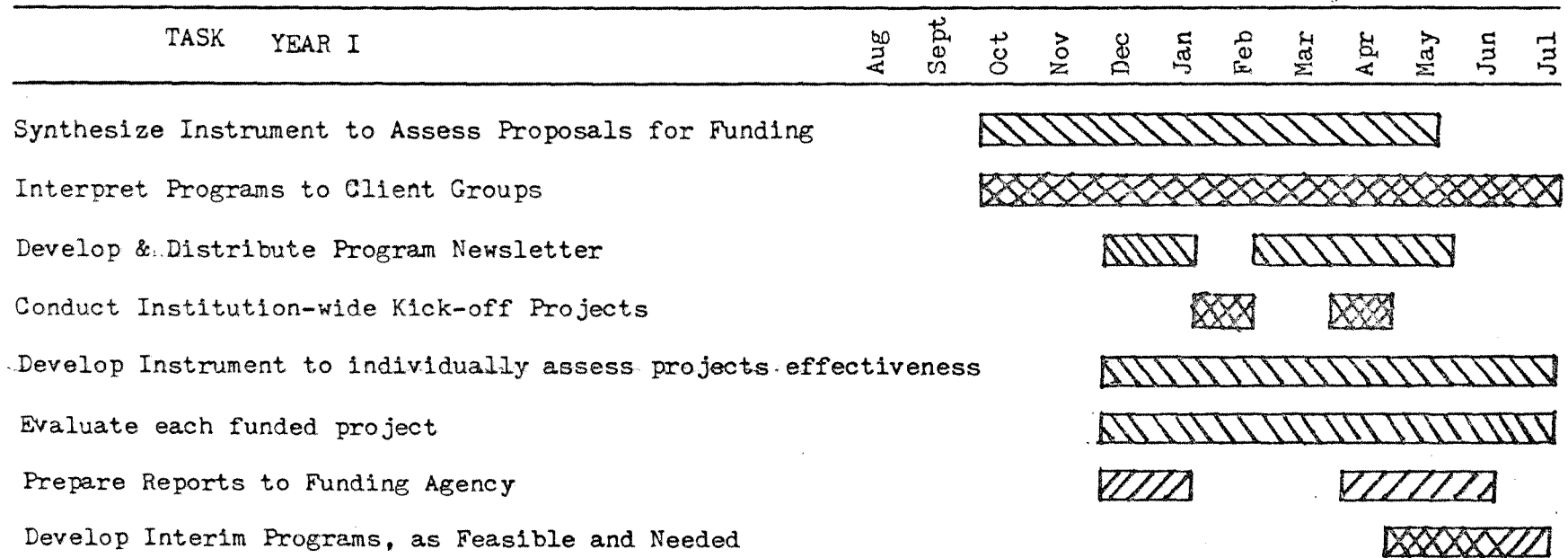


Figure 26 (Continued)

TASK YEAR II	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Counsel with FAC (Feedback/Assessment year I, Projections Year II, Changes)												
Administer Standardized Instrument for Comparison with Baseline Data												
Plan Projects												
Conduct University-wide Projects												
Evaluate Projects												
Attend Regional Training Conferences												
Interpret Data from Standardized Instruments & Disseminate to Dept. and Colleges												
Develop Guidelines to IPDD (Integrated Program for Professional Disciplinary Development)												
Develop Progress Report to Funding Agency												
Develop Interim Programs as Feasible												

Figure 26 (Continued)

TASK	YEAR III	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Counsel with Advisory Committee (Review and Project)													
Administer Standardized Instruments													
Plan Projects													
Conduct University-wide Projects													
Evaluate Projects													
Interpret Standardized Instrument Data & Compare with Baseline, and Disseminate to Respective colleges													
Attend Regional Conferences													
File Progress Report to Foundation													
Refine Final Recommendations of IPDD													
File Completed Report to Funding Agency													
Initiate IPDD													

I. Needs Assessment	II. Goals Setting	III. Proposals for Goals Achievement	IV. Evaluation
<b>I. UNIVERSITY LEVEL</b>			
A. Meet Northwest Area Foundation guidelines (1) (Key attached)	Acceptance of Faculty Development Program	Implementation of Faculty Development Program	Design No. 1 (attached)
B. Academic teaching excellence (1,2,6,7,9) *	Maintain students perception of Drake's image of academic excellence	Proposals for improving academic excellence through Advisory Committee (A.C.) approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
	Maintain special professional/vocational programs	Subscriptions to <u>Chronicle of Higher Education</u> to selected faculty Newsletter of parallel programs at other institutions Proposals for special professional/vocational programs (Approved proposals _____)	
C. Curriculum Assessment (2,4,6,8) *	Increase frequency of introspective curriculum analysis	Proposal for increase frequency of introspective curriculum analysis (Approved proposals _____)	Design No. 1
D. Skills in academic teaching/counseling (1,3,7) *	Develop sensitivity to identified student needs	Proposals for increasing sensitivity to identified student needs through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
E. Student retention (2,3,7,8,9,10,11,14) *	Increase student retention through counseling (Faculty/student interaction)	Proposals for increasing student retention through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 2 (attached)
	Encourage innovation within University goals	Proposals for encouraging innovation through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
F. Student diversity (2,6,7,10) *	Increase diversity of students	Proposals for encouraging increase diversity of students. (Approved proposals _____)	Design No. 2
G. Unity of purpose for University goals (sense of Community) (6,7,9,11,14) *	Provide post-disciplinary opportunities for study, research, scholarship	Proposals for providing post-disciplinary opportunities for study, research, scholarship through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
	Augment opportunities being reduced through Drake's diminishing purchasing powers for travel, replacement, research	Proposals for augmenting opportunities being reduced through Drake's diminishing purchasing powers for travel, replacement, research through A.C. approved workshops, seminars, etc. (Approved proposals _____)	

\* Sources of information used in needs assessment (refer to key pp. 169-70.)

Figure 27

### Outline for Instituting a Faculty Development Program from a Needs Assessment<sup>1</sup>

<sup>1</sup>P. Dyer and J. Gerlovich, "Outline for Instituting a Faculty Development Program," Working Paper for the Faculty Development Program (Des Moines, Iowa: Drake University, 1976-1977). (Xeroxed.)

Figure 27 (Continued)

I. Needs Assessment	II. Goals Setting	III. Proposals For Goals Achievement	IV. Evaluation
<u>II. COLLEGE LEVEL</u>			
A. A awareness of new developments within professions (4,7,8,11) *	Maintain faculty intellectual orientation	Proposals for maintenance of faculty's intellectual orientation through Advisory Committee (A.C.) approved workshops, seminars, etc. (Approved proposals _____)  Subscriptions to <u>Chronicle</u> for select faculty members  Newsletter of parallel programs of other Institutions	Design No. 1
B. Unique personal qualities among faculty supporting college goals (2,6,7,8,11) *	Encourage faculty innovation within college goals	Proposals for encouraging faculty innovation within college goals through A.C. approved workshops, seminars, etc. (Approved proposals _____)  B <sub>2</sub> , B <sub>3</sub> above	Design No. 1
	Maintain special professional/vocational programs	Proposals for maintaining special professional/vocational programs through A.C. approved workshops, seminars, etc. (Approved proposals _____)	
C. Cultural growth (2,5,6,7) *	Increase growth in awareness and appreciation of the literature, music and other arts	Proposals for increasing growth in awareness and appreciation of the literature, music and other arts through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
	Increase intellectual/cultural environment	Proposals for increasing growth in intellectual/cultural environment through A.C. approved workshops, seminars, etc. (Approved proposals _____)	
D. Social growth (2,9,10) *	Increase students' social growth through understanding of other people & their views; experience in relating to others	Proposals for increasing students' social growth through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
E. Vocational Preparation (2,6,7,8,9,11) *	Increase students' vocational/professional growth through preparation in traditional and emerging areas	Proposals for increasing students' vocational/professional growth through preparation in traditional & emerging areas through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1
	Increase interaction with Community	Proposals for increasing interaction with Community through A.C. approved workshops, seminars, etc. (Approved proposals _____)	
F. Cooperative programs beyond disciplines (7,8,11,12) *	Increase post-disciplinary interaction	Proposals for increasing post-disciplinary interaction through A.C. approved workshops, seminars, etc. (Approved proposals _____)	Design No. 1

\* Sources of information used in needs assessment (refer to key pp. 169-70)

Figure 27 (Continued)

I. Needs Assessment	II. Goals Setting	III. Proposals for Goals Achievement	IV. Evaluation
<u>III. INDIVIDUAL LEVEL</u>			
A. Time for acquiring new research methodology (4, 7, 14) *	Provide training & support groups for individuals wishing to renew old, or learn new skills	Proposals for providing training for updating old, or learning of new skills through A.C. approved work-shops, seminars, etc. (Approved proposals _____)	Design No. 1
B. Climate for establishing self as scholar (4, 7) *	Provide opportunities for individuals or groups to engage in advanced study, scholarship, research	Proposals for providing opportunities for advanced study, scholarship, research through A.C. approved work-shops, seminars, etc. (Approved proposals _____)	Design No. 1
C. Climate for individual personal development (7, 8, 14) *	Provide practice in skills needed for personal development: behavior styles	Proposals for providing practice in skills needed for personal development through A.C. approved work-shops, seminars, etc. (Approved proposals _____)	Design No. 1
* Sources of information used in needs assessment (refer to key pp. 169-70.)			
<u>KEY</u>			
A. Needs (Source of Data)			
1. Drake's proposal to Northwest Area Foundation			
2. ACE (Freshman Class, Fall 1975 - Number equal 780)			
3. HILL STUDY, Fall and Spring of 1973 - 75. (Number equals 280)			
4. SURVEY from Committee on Status of Profession (Spring 1976) on Preferred Study			
5. CUES (Pilot run) Spring 1976 (Number equal 44)			
6. NCHEMS (Senior Class) Spring 1976 - discrepancy between Drake's contribution toward achievement and student aspiration in: (Number equal 438 graduating students)			
7. INSTITUTIONAL GOALS INVENTORY, Spring 1974 - discrepancy/rank order (faculty - number equal 169)			
a. intellectual orientation	d. individual - personal development		
b. intellectual/aesthetic environment	e. community		
c. humanism/altruism	f. innovation		

Figure 27 (Continued)

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 KEY
 

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8. Review of recent professional literature
  
  9. Mission Statement from Long Range Planning Committee, ratified by University Senate 5/76
    - a. maintain Drake's image of academic excellence, teaching and comprehensive university leadership
    - b. increase sense of community
    - c. move towards post-disciplinary studies
  10. Enrollment data
    - a. increase student retention
    - b. increase diversity of student selection
  11. Summary from Chronicle reports and parallel Faculty Development Program
    - a. Passim
  12. Report from Vice-President, A.A.
    - a. to Faculty Advisory Committee, 74-76
    - b. to general faculty, 9/76, 11/4/76
  13. Report from President Miller
    - a. to Faculty Advisory Committee, 74-76
  14. Observation of Drake's diminishing purchasing power for travel, faculty replacement, research, . . .
- B. Evaluation Designs
- Data gathered, analyzed by Researcher, distributed to Faculty Advisory Committee for evaluation.
- |   |                               |
|---|-------------------------------|
| <u>General Design No. 1</u>                                   | <u>General Design No. 2</u>   |
| Evaluation of Proposal (Desirability/Feasibility point total) | Evaluation of Enrollment Data |
| Evaluation of Distribution (Projects Matrix)                  | <u>Other</u>                  |
| Evaluation of Workshops (Follow-up Questionnaire)             | CSOP Feedback                 |
| Evaluation of Climate/Growth                                  | General Feedback              |
| IGI Data  | Advisory Committee Feedback   |
| CUES Data   | Level of Participation        |



Efficient, well defined criteria were developed and communicated to the faculty concerning proposals for projects. The Faculty Advisory Committee and the researcher play a critical role here in developing a fair, qualitative and quantitative instrument for assessing projects for funding based on clarified goals.

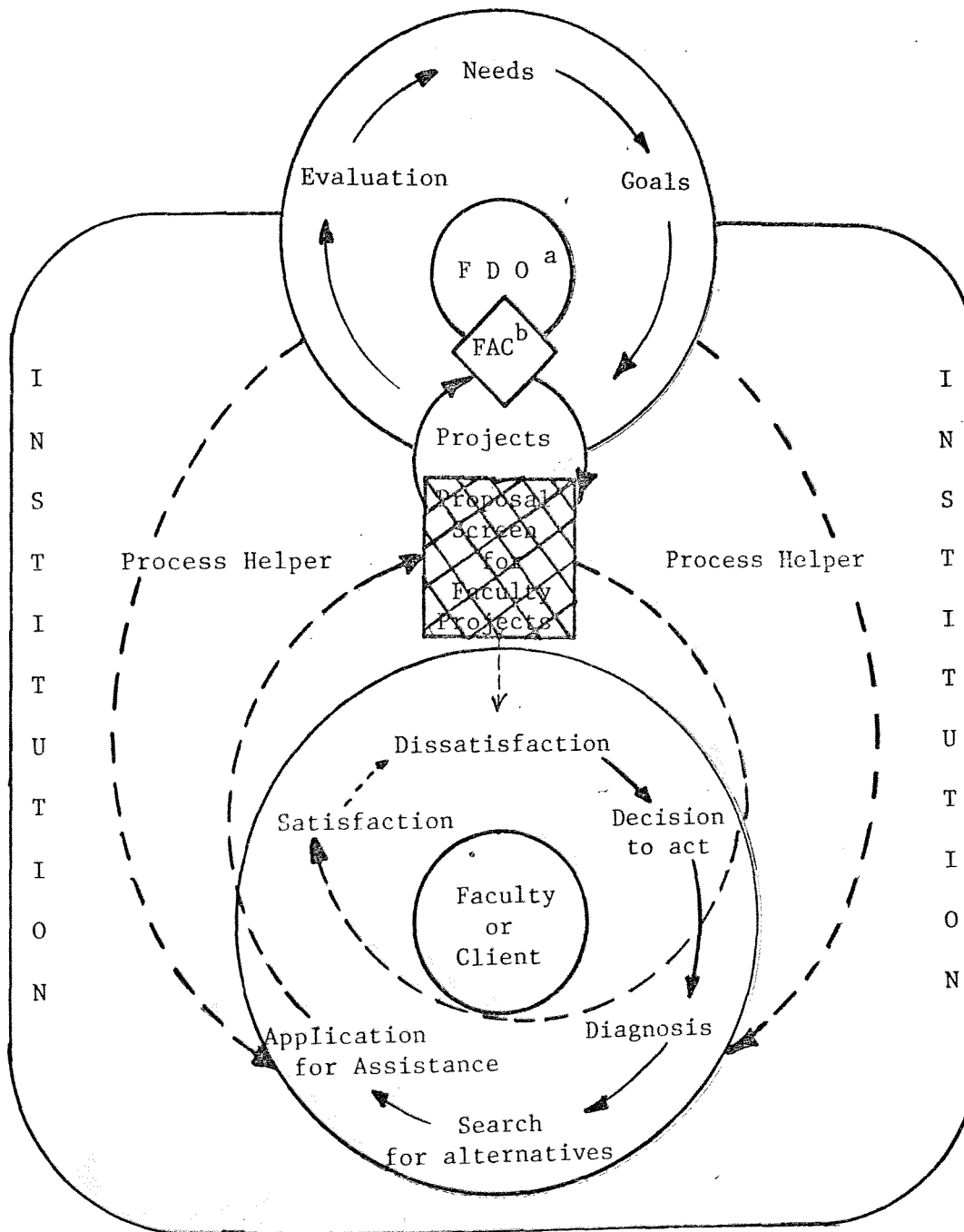
After any faculty initiated project has been funded and conducted, its effect is assessed. Again the Advisory Committee and researcher need to design a fair, concise instrument to quantitatively assess the project and qualitatively provide for suggestions and comments. Two general designs for evaluation have been presented here for illustrating project and program assessment.

#### PARADIGM FOR CHANGE AND EVALUATION IN FACULTY DEVELOPMENT WITHIN AN INSTITUTION

The synthesized paradigm for change and evaluation in faculty development (Figure 28) is a summative complement to the two previous portions of the total model. There are two integral sub-parts in any faculty development program--the Faculty Development Office (FDO) and the faculty members or client system.

The FDO serves as a link between the institution and society, helping assess the needs of each and showing the value of a cooperative interdependence.

Within the FDO, specific needs of the faculty, and



<sup>a</sup>Faculty Development Office

<sup>b</sup>Faculty Advisory Committee, representatives of the total institutional staff (10-25 persons)

Figure 28

Paradigm for Change and Evaluation in Faculty Development within an Institution

outside clients it seeks to serve, are identified from reliable data collected and assessed by the research staff and coordinator. After a priority list has been established, the goals are synthesized from the needs. The synthesis process requires extensive interaction with the Faculty Advisory Committee (FAC). The FAC should be composed of representatives from all segments of the faculty which the FDO seeks to help. Following the goals synthesis, program guidelines need to be stated as measurable objectives. Next, instruments need to be designed by the research staff, and approved by the FAC, to qualitatively and quantitatively measure the degree to which faculty proposed projects will meet the goals and objectives. Next faculty proposed projects are solicited. Then, relevant projects are obtained through publication of the program's goals and guidelines in a specific newsletter devoted to the program. Then a personalized, nonthreatening projects evaluation system needs to be developed by the research staff, and approved by the FAC.

With this understanding of the FDO relation to society and the institutional faculty, and its inner functioning, an example of a faculty problem will be run through the entire model for clarification.

When a faculty member, department, or college, within the institution, experiences some dissatisfaction, with which the FDO can be of service, they make a decision

to act on this dissatisfaction. After diagnosing their problem, they begin a search for alternatives. When the search has narrowed the dissatisfaction to a specific problem, they submit an application form for aid, in the form of a project (workshop, outside consultant, seminar, training of faculty, etc.) to the FDO for approval.

If the faculty experiences problems anywhere between diagnosis and application writing for projects, the FDO will send out a process helper to give aid where needed. This aid may consist of goals and guidelines clarification, providing data for problem diagnosis and alternative searching, or direct assistance in application preparation.

Once the project has been submitted to the FDO, the FAC will assess its merit by running it through the proposal screen. The proposal screen consists of the instruments developed for assessing the proposed projects strength in meeting the programs goals. If the proposed project is funded and the project is approved and conducted, it should satisfy that problem experienced originally by the faculty. A follow-up evaluation of the project's effectiveness in meeting its intended goals is conducted and the results sent to the proposer so he may also assess the projects success and suggestions made by its participants. If the project did not satisfy the faculty problem or suggested new possibilities, faculty may want to reassess their problem and resubmit another application for FDO aid.

If the proposed application is turned down by the FDO, a new dissatisfaction has been created and may suggest re-assessment of the problem to the proposer for resubmission of the application. The proposer may request a personal appearance before the FAC voting body for clarification of proposal problems or request a process helper from FDO to aid in problem clarification.

The model appears to have application within and outside of higher education. Any institution seeking to obtain maximum efficiency from personnel may find the model useful in identifying, clarifying, and alleviating problems experienced by personnel which may be hindering the smooth operation of the institution.

## Chapter 5

### SUMMARY AND DISCUSSION

The literature points to the fact that change is inevitable. Pressures mounting for changes in accountability in teaching have become increasingly difficult to attain in times of economic stress. Teaching institutions are especially susceptible to criticism since their futures lie almost solely with their faculties' teaching effectiveness. Generally a very small percentage of their budgets are attained from governmental, state or other research. Thus, means of maintaining and/or increasing faculty teaching vitality and effectiveness becomes critical to the future of teachers in private higher education.

Private higher education appears to be in an unique position to experiment in this area with minimal regulatory constraints. Institutions such as Drake University with their independent status, reputation for teaching excellence and diversity of offerings (professional and other colleges), provide an example for such program development.

The purpose of this study was to develop a model for faculty development. The study actually served a dual purpose: the development of the model, and a report of the first year's program of Faculty Development at Drake University.

The model appears to be applicable to any institution

seeking change and the development of personnel resources, or curricular changes. Whereas, the model was designed for the university setting, its strength lies in its ease of application and broadness of scope for any institution. The model provides suggestions for assessing institutional and personal needs; goals, or objectives clarification; suggestions for obtaining faculty or client project proposals to meet those objectives, and an evaluation of project's effectiveness. It shows the strength found in the separation of the Faculty or Personnel Development Office from the institution. The FDO can more effectively serve as a facilitator, and process helper for change. In addition, the linkage which exists through a Faculty, or client, Advisory Committee and the proposals screen provides further means for understanding the individual's problems and clarification of institutional goals.

Another asset of the model is its circular nature. This model provides the individual with more than one chance at obtaining satisfaction of a felt need, through appeals and recycling through the entire process repeatedly.

At this point, the most conspicuous weakness, which can be identified in the model, is its lack of testing time for validity in the Drake University program, and its reliability in others.

In summary, this study sought to combine the theoretical information of change, faculty development, and

evaluation with practical instruments to create a model for accomplishing the assessment, implementation, and evaluation of institutional programs' effectiveness. The model appears to be an effective beginning toward a much needed blend of theory and practicality with application in a wide range of situations.

### RECOMMENDATIONS

#### Program

. It was found that a common meeting time for the Advisory Committee be obtained for quorum representation and voting purposes. If priority is to be given to such programs, the Faculty Advisory Committee members normal load should be lightened to assure common meeting times.

. A decision should be made as to whether or not project proposals should be anonymous, since biases between personalities may affect faculty voting.

. Faculty Advisory Committee should have the opportunity to work as a group before decisions need to be made. This will aid in increased efficiency of operation and decision-making.

. Faculty Advisory members should serve three year terms with one-third rotation each year.

. External cursory evaluation of any change program should be undertaken periodically.

. There should be more personal interaction between



the Faculty Development Office and administrators such as deans, principles, or managers, to assure up-to-date program decisions.

. A decision should be made concerning clients (faculty, etc.) encouraged participation, through small bonuses, to cross disciplines in order to broaden their horizons and aid them in being conversant with a wider variety of peers, subordinates and superordinates.

The creation of a development board should be explored which separates duties into assessment, implementation, and evaluation. Such separation will reduce many conspicuous and hidden biases.

#### Drake University

The following recommendations are made specifically for the Drake University program.

. Since increased student retention was an identified need, study of the data obtained by the Drake Admissions Office concerning why students drop-out of Drake should be performed.

. Greater usage of the excellent computer facilities should be made by faculty in aiding instructional evaluation, and reducing the fear of the technology.

. More emphasis must be placed on the importance of the standardized instruments (IGI, CUES) by deans and faculty to improve data for assessing climate and program changes.

. The Drake Office of Faculty Development appears to have accomplished much more in less time, than other institutions concerning change. It is recommended that this office become an integral part of the university structure but do so from a power (staff) position, thus avoiding the line bureaucracy. Exploring periodic review of faculty and staff, in place of tenure (meaningless when 80 percent of faculty and staff have it), might identify the places where increased budgetary efficiency could provide funds for continuation of this program.

. The needs of the geographical region serviced by Drake University needs should be assessed for programs that this institution might offer that would make it unique, while enhancing its traditional program offerings.

#### SUGGESTIONS FOR FURTHER RESEARCH

Further research is recommended in the following areas.

. The relationship between student retention and reasons for dropping out of college, which may be related to teaching, should be explored.

. The effect of the mid-career crisis on personal teaching effectiveness needs exploration, since its effect may spread to other faculty.

. The possible resource of non-traditional learners needs to be assessed.

. The pros and cons of forming a consortium of private institutions of higher education for resolving common problems needs exploration.

. The possibility of faculty exchange programs with other institutions, as an economic means of revitalizing staff and incorporating new ideas needs exploration.

## BIBLIOGRAPHY

## BIBLIOGRAPHY

### A. BOOKS

- Astin, A. W., and others. Faculty Development: In a Time of Retrenchment. New Rochelle, New York: The Group for Human Development in Higher Education and Change Magazine, 1974.
- Bennis, W. G., K. D. Benne, and R. Chin. The Planning of Change. New York: Holt, Rinehart and Winston, Inc., 1969.
- Bergquist, W. H., and S. R. Phillips. A Handbook for Faculty Development. Montpelier, Vermont: Capital City Press, 1975.
- Bloom, B. S., and others. Taxonomy of Educational Objectives. New York: Longmans and Green, 1956.
- Burrup, P. E. Financing Education in a Climate of Change. Boston: Allyn and Bacon, Inc., 1974.
- Cogan, M. L. Clinical Supervision. Boston: Houghton Mifflin Company, 1973.
- Eble, K. E. Career Development of the Effective College Teacher. Washington, D.C.: American Association of University Professors and Association of American Colleges, 1971.
- \_\_\_\_\_. Professors as Teachers. San Francisco: Jossey-Bass Publishers, 1973.
- Ewald, W. R., Jr. Environment and Change: The Next 50 Years. Bloomington: Indiana University Press, 1971.
- Feldman, K. A., and others. The Impact of College on Students. San Francisco: Jossey-Bass Publishers, 1969.
- Frymier, J. R., and H. C. Hawn. Curriculum Improvement for Better Schools. Worthington, Ohio: C. A. Jones Publishing Company, 1970.
- Gaff, J. G. Toward Faculty Renewal. San Francisco: Jossey-Bass Publishers, 1975.
- Gage, N. L., ed. Handbook of Research on Teaching. Chicago: Rand McNally & Company, 1963.

- Good, W. J., and P. K. Hatt. Methods in Social Research. New York: McGraw Hill, 1952.
- Gottman, J. M., and R. E. Clasen. Evaluation in Education: A Practitioner's Guide. Itasca, Illinois: F. E. Peacock Publishers, Inc., 1974.
- Gwaltney, Corbin. The Chronicle of Higher Education Desk Book 1976-77. Washington, D.C.: Editorial Projects for Education, Inc., 1976.
- Hamilton, I. B. The Third Century: Postsecondary Planning for the Nontraditional Learner. Princeton: Educational Testing Services, 1976.
- Harrison, R., and P. Runkel, eds. The Changing College Classroom. San Francisco: Jossey-Bass Publishers, 1969.
- Havelock, R. G. The Change Agent's Guide to Innovation in Education. Englewood Cliffs, New Jersey: Educational Technology Publications, 1975.
- \_\_\_\_\_, and M. C. Havelock, eds. Training for Change Agents: A Guide to the Design of Training Programs in Education and Other Fields. Ann Arbor: Litho Crafters, Inc., 1973.
- \_\_\_\_\_, and others. Planning for Innovation Through Dissemination and Utilization of Knowledge. Ann Arbor, University of Michigan, Institute for Social Research, 1976.
- Herman, J. J. Developing an Effective School Staff Evaluation Program. West Nyack, New York: Parker Publishing Company, Inc., 1973.
- Hodgkinson, H., and others. A Manual for Evaluation of Innovative Programs and Practices in Higher Education. Berkeley: Center for Research and Development in Higher Education, University of California, 1974.
- Ikenberry, O. S. American Education Foundations: An Introduction. Columbus, Ohio: Charles Merrill Publishing Company, 1974.
- Jacob, P. Changing Values in College. New York: Harper and Row, 1957.
- Knowles, Malcolm. Self-Directed Learning: A Guide for Learners and Teachers. New York: Association Press, 1975.

- Murphy, G., and R. Likert. Public Opinion and the Individual. New York: Harper and Brothers Publishers, 1938.
- Nahm, M. C. Selections from Early Greek Philosophy. New York: Appleton-Century-Crofts, Inc., 1947.
- Redfern, G. B. How to Evaluate Teaching: A Performance Objectives Approach. Worthington, Ohio: School Management Institute, 1972.
- Rogers, E. M., and F. F. Shoemaker. Communications of Innovations. New York: Free Press of Glencoe, Inc., 1971.
- Sergiovanni, T. J., and R. J. Starratt. Emerging Patterns of Supervision: Human Perspectives. New York: McGraw-Hill Book Company, 1971.
- Sikes, W. W., L. E. Schlesinger, and C. N. Seashore. Renewing Higher Education from Within. San Francisco: Jossey-Bass Publishers, 1974.
- Taba, H. Curriculum Development: Theory and Practice. New York: Harcourt, Brace and World, 1962.
- Travers, R. M. W., ed. The Second Handbook of Research on Teaching. Chicago: Rand McNally & Company, 1973.
- Tyler, R. W. Constructing Achievement Tests. Columbus, Ohio: Ohio State University Press, 1934.

#### B. PERIODICALS

- Astin, A. W. "Some Characteristics of Student Bodies Entering Higher Educational Institutions," Journal of Educational Psychology, LV, No. 5 (October, 1964), 267-275.
- Birnbaum, R. "Using the Calendar for Faculty Development," Educational Record, LVI, No. 4 (1976), 227.
- Brodinsky, B. "Back to the Basics: The Movement and Its Meaning," Phi Delta Kappan, LVIII, No. 7 (March, 1977), 522-527.
- Centra, J. A. "Survey of Faculty Development Practices," Faculty Development and Evaluation in Higher Education, II, No. 3 (Fall, 1976), 2-6.

- Deming, B. S., and J. A. Phillips, Jr. "Systematic Curriculum Evaluation: A Means and Methodology," Theory Into Practice, XIII, No. 1 (February, 1974), 42.
- Dyer, P., and M. Prentice. "Planning Educational Futures," The Educational Forum, XXXIV, No. 4 (May, 1975), 479-483.
- "Faculty Unionization," The Chronicle of Higher Education, XIV, No. 2 (March 7, 1977), 2.
- Fleming, R. W. "Reflections on Higher Education," Daedalus, II (Winter, 1975), 12.
- Gaff, J. G. "An Agenda for Cooperation in Faculty Development," Faculty Development and Evaluation in Higher Education, I, No. 1 (1975), 4.
- \_\_\_\_\_, and R. C. Wilson. "The Teaching Environment," American Association of University Professors Bulletin, LVII (December, 1971), 490-493.
- Garson, A. "Enrollment Decline Hits Iowa's Schools," Des Moines Sunday Register, October 24, 1976, p. 8A.
- Gerlovich, J., and P. Dyer. SPECTRUM - News of the Drake University Faculty Development Program. (Drake University), I, No. 1 (December, 1976).
- \_\_\_\_\_. SPECTRUM - News of the Drake University Faculty Development Program. (Drake University), I, No. 2 (January, 1977).
- \_\_\_\_\_. SPECTRUM - News of the Drake University Faculty Development Program. (Drake University), I, No. 3 (March, 1977).
- Getzels, J. W., and E. G. Guba. "Social Behavior and the Administrative Process," The School Review, LXV (1957), 423-441.
- "Give Students More Money, Colleges Less, N. J. Urged," The Chronicle of Higher Education, XIII, No. 18 (January 17, 1977), 2.
- Gruabard, S. R. "Thoughts on Higher Education Purposes and Goals," Daedalus, I (Fall, 1974), 6.
- Jacobs, J. "A Model for Program Development and Evaluation," Theory Into Practice, XIII, No. 1 (February, 1974), 15.



- Kerr, Clark. "What We Might Learn from the Climateric," Daedalus, II (Winter, 1975), 3.
- Lavaroni, C. W., and J. J. Savant. "Replacing Tenure with Periodic Review," Phi Delta Kappan, LVIII, No. 6 (February, 1977), 499.
- Lehrer, Janine. "Recruiting Seen as Big Success," Times-Delphic (Drake University), November 19, 1976, pp. 1-6.
- Libbee, M. "A Simple Diagnostic Teaching Evaluation Technique," Faculty Development and Evaluation in Higher Education, II, No. 3 (Fall, 1976), 7-8.
- Light, D., Jr. "Thinking About Faculty," Daedalus, I (Fall, 1974), 262.
- Margarell, Jack. "Number of Students Declines for First Time Since 1951," The Chronicle of Higher Education, XIII, No. 23 (February 22, 1977), 6.
- \_\_\_\_\_. "Public College Enrollment Growth Appears to be at a Stand Still," The Chronicle of Higher Education, XIII, No. 12 (November 22, 1976), 3.
- Pace, R. "The Demise of Diversity?", Daedalus, I (Fall, 1974), 261.
- Phillips, S. R. Faculty Development Newsletter (University of Puget Sound), October 15, 1975.
- Roarck, A. C., and K. J. Winkler. "House Subcommittees Approves \$3.6 Billion for Education," The Chronicle of Higher Education, XIV, No. 2 (March 7, 1977), 13.
- Rose, C. "Evaluation: The Misunderstood, Maligned, Misconstrued, Misused and Missing Component of Professional Development," Faculty Development and Evaluation in Higher Education, II, No. 3 (Fall, 1976), 23.
- Scully, M. G. "Many Colleges Re-appraising Their Undergraduate Curricula," The Chronicle of Higher Education, XIII, No. 21 (February 7, 1977), 1.
- Semas, P. W. "New Financing Plan Worries Canada's Academics," The Chronicle of Higher Education, XIII, No. 21 (February 7, 1977), 5.
- "Stevens Faculty Ends Strike After 18 Days," The Chronicle of Higher Education, XIII, No. 23 (February 22, 1977), 4.

Trow, M. "A Conservative Trend on Academic Issues," The Chronicle of Higher Education, XIII, No. 18 (January 17, 1977), 6.

Van Dyne, L. "Realign CUNY, SUNY in Two State Systems, New York is Urged," The Chronicle of Higher Education, XIV, No. 2 (March 7, 1977), 4-5.

Weiss, C. H. "The Politicization of Evaluation Research," Journal of Social Issues, XXVI, No. 4 (1970), 57-68.

Zeckhauser, Sally, and Richard Zeckhauser. "Encouraging Improved Performance in Higher Education," Daedalus, II (Winter, 1975), 3.

#### C. GOVERNMENT PUBLICATION

Chamber of Commerce of the United States. Education, An Investment in People. Washington, D.C.: Chamber of Commerce, 1955.

#### D. OTHER SOURCES

College and University Environment Scales. Princeton, New Jersey: Institutional Research Program for Higher Education - Educational Testing Services, conducted by Drake University, Spring, 1975.

Committee on Status of Profession. "Drake University Faculty Development Program, a Proposal to the Northwest Area Foundation," March 30, 1976.

Crow, M. L., and others. Faculty Development Centers in Southern Universities. Atlanta: Southern Regional Board, 1976.

Dial Computer Center, Data Base. "A Report on Faculty/Administration Mean Age, Standard Deviation, and Tenure, 1969-1977," Drake University, March, 1977.

Doxiadis, C. "The Desirability-Feasibility Grid for the Consideration of Alternatives." Athens Center of Ekistics, The World Society of Ekistics Conference on Education, Document B, No. 13, July, 1971.

Huckfeldt, V. A Forecast of Changes in Postsecondary Education. Boulder: Western Interstate Commission for Higher Education - WICHE, November, 1972.

Institutional Goals Inventory. Princeton, New Jersey: Educational Testing Services, conducted by Drake University, Spring, 1974, and Fall, 1976.

Institutional Goals Inventory: Summary Data Report for Drake University. Princeton, New Jersey: Educational Testing Services College and University Programs, March, 1977.

Mayhew, L. B. How Colleges Change: Approaches to Academic Reform. Stanford, California: Stanford Center for Research and Development in Teaching, U.S., Educational Resources Information Center, ERIC Document ED 125 607, July, 1976.

Micek, S., and W. Arney. The Higher Education Outcomes Measures Identification Study. Boulder: Western Interstate Commission for Higher Education - WICHE, November, 1974.

National Center for Higher Education Management Systems. Boulder: Western Interstate Commission for Higher Education - WICHE, conducted by Drake University, Spring, 1976.

Office of Vice President Academic Administration. A report on Faculty/Administrators Tenure, 1969-1977, Drake University, March, 1977.

Office of Vice President Business and Finance. A report on Drake University Endowment and Annuity Fund Balances, Drake University, March, 1977.

Office of the Registrar. Drake University Enrollment Figures, Drake University, March, 1977.

Steele, Mildred. "A Report for the North Central Association of Colleges and Secondary Schools, Vol. I." Des Moines, Iowa: Drake University, November, 1976.

The Student Information Form. Los Angeles: American Council on Education, 1975.

## E. UNPUBLISHED SOURCES

Boulding, Kenneth. "Dilemma in Higher Education." Address at Kansas City Regional Conference on Higher Education, Kansas City, Missouri, January 22, 1977.

Bowen, Howard. "Economics and Options." Address at Drake University, Des Moines, Iowa, February 4, 1977. Tape available at University Faculty Development Program Office.

\_\_\_\_\_. "Economic Projections and Enrollment in Private Higher Education." Address at Drake University, Des Moines, Iowa, February 3, 1977. Tape available at University Faculty Development Program Office.

\_\_\_\_\_. "Trends in Educating the Adult Learner." Address at Drake University, Des Moines, Iowa, February 4, 1977. Tape available at University Faculty Development Program Office.

\_\_\_\_\_. "Values and Dilemma in Higher Education." Address at Drake University, Des Moines, Iowa, February 3, 1977.

Dyer, P. "Guidelines for Application." A Working Paper for the Faculty Development Program. Des Moines, Iowa: Drake University, Spring, 1977. (Xeroxed.)

\_\_\_\_\_. "Projects Proposals Log." A Working Paper for the Faculty Development Program. Des Moines, Iowa: Drake University, 1976-77. (Xeroxed.)

\_\_\_\_\_, and J. Gerlovich. "Guidelines for Support for Faculty Development Program." A Working Paper for the Faculty Development Program. Des Moines, Iowa: Drake University, Spring, 1977. (Xeroxed.)

\_\_\_\_\_. "Needs, Goals, Goal Achievement, and Evaluation Designs." A Working Paper for the Drake University Development Program. Des Moines, Iowa: Drake University, November 20, 1976. (Xeroxed.)

\_\_\_\_\_. "Outline for Instituting a Faculty Development Program." A Working Paper for the Faculty Development Program. Des Moines, Iowa: Drake University, 1976-77. (Xeroxed.)

- \_\_\_\_\_. "Projects Matrix." A Working Paper for the Drake University Faculty Development Program. Des Moines, Iowa: Drake University, 1976-77. (Xeroxed.)
- \_\_\_\_\_. "Working Draft for an Integrated Program for Professional and Disciplinary Development." Faculty Development Program. Des Moines, Iowa: Drake University, 1977. (Xeroxed.)
- Eastmond, J. N., Jr. "Instructional Development Under the Microscope Perceptions of Faculty Members." Logan: Utah State University, June, 1975. (Mimeographed.)
- Erickson, G. R., and B. L. Erickson. "Report to the Attendance of the Faculty Development Conference." Warrington: Arlie House, October, 1976. (Xeroxed.)
- Gaige, F. "Stages in Career Development of Faculty Members." Address at Kansas City Regional Conference on Higher Education, Kansas City, Missouri, January 22, 1977.
- Nimmer, D. N. "Dissemination of Educational Information Through Various Media Channels." Address at the National Association of Research in Science Teaching Annual Conference, Cincinnati, Ohio, March 23, 1977. Tape available with this author.
- Office of the Assistant Vice Chancellor for Academic Systems. "Faculty Development Program." Oshkosh: University of Wisconsin - Oshkosh, August, 1976. (Mimeographed.)
- Office of Admissions. Hill Advisory Unit Study. Des Moines: Drake University, October 25, 1974. (Mimeographed.)
- Prentice, M. "Timeline for a 3-Year Program." A Working Paper for the Committee on Status of Profession. Des Moines, Iowa: Drake University, Spring, 1976.
- Toffler, Alvin. "Politics Today and Tomorrow." Address at Drake University, Des Moines, Iowa, November 9, 1976.
- Webb, Jeaninne. "Office of Instructional Resources." Gainesville: University of Florida, 1976. (Mimeographed.)

## APPENDICES

## APPENDIX A

### TABLES

Table 11

Cost-Change Patterns for Higher Education<sup>1</sup>

	Fiscal Years				
	1971	1972	1973	1974	1975
Yearly change, in percent					
Professional salaries	5.0%	3.9%	4.5%	5.1%	5.7%
Non-professional salaries & wages	7.8%	7.3%	6.0%	6.3%	8.0%
Fringe benefits	10.8%	11.2%	9.7%	12.3%	8.6%
Total	6.2%	5.5%	5.5%	6.4%	6.6%
Services	5.4%	6.0%	4.4%	4.7%	8.8%
Supplies & materials	3.7%	2.1%	3.3%	13.2%	24.8%
Equipment	4.0%	3.7%	3.1%	6.1%	18.0%
Books & periodicals	16.3%	7.4%	2.6%	8.0%	16.0%*
Utilities	10.5%	6.8%	5.4%	22.7%	28.3%
Total	6.9%	5.3%	4.0%	9.6%	17.2%
Higher Education Price Index	6.4%	5.5%	5.2%	7.0%	8.6%
*estimate					

<sup>1</sup>Corbin Gwaltney, *The Chronicle of Higher Education Desk Book 1976-77* (Washington, D.C.: Editorial Projects of Education, Inc., 1976), p. 116.



Table 12  
20-Year Trends in Degrees Awarded<sup>1</sup>

### Bachelor's Degrees

	1963-64	1965-66	1967-68	1969-70	1971-72	1973-74 <sup>1</sup>	1975-76	1977-78	1979-80	1981-82	1983-84
<b>Social sciences</b>											
Social sciences .....	74,930	91,198	118,426	151,391	160,620	177,220	174,330	179,270	182,000	183,230	178,430
Psychology .....	13,258	16,841	23,768	33,536	43,080	52,420	56,520	62,910	68,780	74,110	76,940
Public affairs & services .....	1,446	2,042	2,894	4,414	12,540	15,930	17,730	20,300	22,010	23,180	23,610
Library sciences .....	510	642	814	1,054	990	1,120	1,150	1,210	1,240	1,260	1,230
<b>Total</b> .....	<b>90,144</b>	<b>110,723</b>	<b>145,902</b>	<b>190,395</b>	<b>217,230</b>	<b>246,690</b>	<b>249,730</b>	<b>263,690</b>	<b>274,030</b>	<b>281,780</b>	<b>280,210</b>
<b>Humanities</b>											
Architecture & environmental design ..	2,059	2,663	3,262	4,105	6,440	7,560	7,800	8,450	8,790	8,820	8,560
Fine & applied arts .....	16,159	18,679	25,521	35,901	33,810	37,940	38,000	39,390	40,190	40,560	39,510
Foreign languages .....	12,160	15,185	19,128	20,895	18,800	21,300	21,580	22,480	23,000	23,240	22,740
Communications .....	2,560	3,131	4,363	5,959	12,340	14,550	15,290	16,720	17,990	18,610	18,530
Letters .....	40,027	47,358	58,070	67,815	73,200	82,150	82,280	85,320	87,050	87,830	85,790
<b>Total</b> .....	<b>72,965</b>	<b>87,017</b>	<b>110,344</b>	<b>134,675</b>	<b>144,580</b>	<b>163,500</b>	<b>164,950</b>	<b>172,360</b>	<b>177,020</b>	<b>179,060</b>	<b>175,330</b>
<b>Natural sciences and miscellaneous fields</b>											
Mathematics & statistics .....	18,624	19,977	23,513	27,442	23,630	25,800	25,190	25,730	25,890	25,870	25,010
Computer & information sciences .....	—	89	459	1,544	3,370	4,610	5,350	6,380	7,320	8,340	9,050
Engineering .....	37,014	37,971	40,541	49,678	50,310	47,180	36,180	40,060	44,840	48,550	48,720
Physical sciences .....	17,457	17,129	19,380	21,439	20,400	21,400	20,080	19,930	19,670	19,290	18,380
Biological sciences .....	22,454	26,565	31,429	37,031	37,230	40,840	39,960	40,990	41,540	41,780	40,660
Agricultural & natural resources .....	6,947	7,863	9,215	12,382	13,640	14,710	14,110	14,340	14,450	14,500	14,070
Health professions .....	13,421	15,848	18,170	22,141	28,420	32,610	36,640	38,750	40,180	41,620	42,020
Accounting .....	13,675	14,903	17,922	21,183	24,800	30,250	33,750	36,340	36,670	36,820	35,730
Other business & management .....	45,523	48,736	62,670	84,871	97,030	105,110	101,380	103,400	104,570	105,200	102,330
Education .....	110,559	115,173	132,087	161,904	190,850	208,530	203,960	206,060	205,120	202,170	193,380
Other <sup>2</sup> .....	17,703	18,254	20,291	26,825	31,980	35,770	35,720	36,970	37,700	38,020	37,120
<b>Total</b> .....	<b>303,377</b>	<b>322,508</b>	<b>325,677</b>	<b>466,440</b>	<b>521,650</b>	<b>566,810</b>	<b>552,320</b>	<b>568,950</b>	<b>577,950</b>	<b>582,160</b>	<b>566,470</b>

<sup>1</sup> Gwaltney, op. cit., p. 206.

Table 12 (Continued)

## Master's Degrees

	1963-64	1965-66	1967-68	1969-70	1971-72	1973-74	1975-76	1977-78	1979-80	1981-82	1983-84
<b>Social sciences</b>											
Social sciences .....	8,519	11,616	14,644	16,659	18,480	19,650	20,570	21,610	22,430	22,890	22,720
Psychology .....	2,059	2,423	3,237	3,953	5,290	5,690	5,980	6,290	6,530	6,680	6,640
Public affairs & services .....	3,251	4,586	5,552	6,755	9,360	10,480	11,390	12,320	13,160	13,800	14,040
Library sciences .....	2,717	3,916	5,165	6,511	7,380	8,340	8,930	9,470	9,330	10,120	10,060
<b>Total</b> .....	<b>16,546</b>	<b>22,541</b>	<b>28,598</b>	<b>33,878</b>	<b>40,520</b>	<b>44,160</b>	<b>46,870</b>	<b>49,690</b>	<b>51,950</b>	<b>53,490</b>	<b>53,450</b>
<b>Humanities</b>											
Architecture & environmental design ..	383	702	1,021	1,427	1,900	2,180	2,500	2,830	3,180	3,470	3,670
Fine & applied arts .....	3,673	5,019	6,563	7,849	7,540	8,170	8,640	9,100	9,450	9,670	9,600
Foreign languages .....	2,196	3,393	4,511	4,803	4,620	5,120	5,450	5,760	6,000	6,150	6,110
Communications .....	364	523	730	852	2,200	2,610	2,980	3,370	3,750	4,090	4,320
Letters .....	5,550	8,030	10,141	11,364	12,710	13,990	14,840	15,670	16,310	16,690	16,590
<b>Total</b> .....	<b>12,166</b>	<b>17,667</b>	<b>22,966</b>	<b>26,305</b>	<b>28,960</b>	<b>32,070</b>	<b>34,410</b>	<b>36,730</b>	<b>38,590</b>	<b>40,070</b>	<b>40,290</b>
<b>Natural sciences and miscellaneous fields</b>											
Mathematics & statistics .....	3,625	4,769	5,527	5,636	5,190	5,410	5,550	5,740	5,870	5,910	5,780
Computer & information sciences .....	—	238	548	1,459	1,850	2,000	2,140	2,330	2,500	2,620	2,690
Engineering .....	10,857	13,717	15,247	15,723	16,650	16,640	16,780	17,160	17,400	17,400	17,000
Physical sciences .....	4,555	4,977	5,499	5,935	6,160	6,160	6,170	6,270	6,300	6,260	6,060
Biological sciences .....	3,296	4,233	5,506	5,800	6,100	6,450	6,680	6,940	7,100	7,160	7,010
Agriculture & natural resources .....	1,682	2,034	2,234	2,197	2,660	2,750	2,850	2,970	3,080	3,140	3,110
Health professions .....	2,279	2,833	3,736	4,488	7,120	7,960	8,680	9,450	10,170	10,800	11,170
Accounting .....	530	862	1,137	1,083	1,380	1,440	1,490	1,560	1,620	1,640	1,630
Other business & management .....	5,983	12,280	16,964	20,516	28,580	29,930	31,370	33,240	34,560	35,490	35,410
Education .....	40,376	49,905	62,927	78,275	97,730	107,530	114,070	120,440	125,330	128,290	127,500
Other .....	3,656	4,492	5,860	6,996	7,180	7,600	7,840	8,080	8,230	8,230	7,990
<b>Total</b> .....	<b>76,819</b>	<b>100,340</b>	<b>125,185</b>	<b>148,108</b>	<b>180,600</b>	<b>193,870</b>	<b>203,620</b>	<b>214,180</b>	<b>222,260</b>	<b>226,940</b>	<b>225,350</b>

Table 12 (Continued)

## Doctoral Degrees

	1963-64	1965-66	1967-68	1969-70	1971-72	1973-74 <sup>1</sup>	1975-76	1977-78	1979-80	1981-82	1983-84
<b>Social sciences</b>											
Social sciences .....	1,659	1,980	2,640	3,592	4,240	4,350	4,950	5,360	5,510	5,780	6,040
Psychology .....	939	1,037	1,232	1,620	1,880	1,970	2,560	2,040	3,030	3,180	3,320
Public affairs & services .....	66	93	110	131	210	220	240	260	270	280	290
Library sciences .....	13	19	22	40	60	70	80	80	60	80	90
<b>Total</b> .....	<b>2,677</b>	<b>3,129</b>	<b>4,004</b>	<b>5,383</b>	<b>6,390</b>	<b>6,610</b>	<b>7,830</b>	<b>8,640</b>	<b>8,890</b>	<b>9,320</b>	<b>9,740</b>
<b>Humanities</b>											
Architecture & environmental design ..	3	12	15	35	50	60	70	90	100	120	130
Fine & applied arts .....	422	476	528	734	570	620	720	860	880	920	960
Foreign languages .....	326	428	610	760	840	920	1,000	990	970	1,020	1,060
Communications .....	14	15	32	17	110	110	130	130	140	140	160
Letters .....	853	1,130	1,594	1,930	2,590	2,660	2,970	3,170	3,260	3,430	3,590
<b>Total</b> .....	<b>1,623</b>	<b>2,061</b>	<b>2,779</b>	<b>3,476</b>	<b>4,160</b>	<b>4,440</b>	<b>4,840</b>	<b>5,240</b>	<b>5,350</b>	<b>5,630</b>	<b>5,900</b>
<b>Natural sciences and miscellaneous fields</b>											
Mathematics & statistics .....	596	782	947	1,236	1,130	1,000	980	890	920	960	1,010
Computer & information sciences .....	—	19	36	107	170	270	410	490	500	530	560
Engineering .....	1,705	2,315	2,933	3,691	3,660	3,320	3,330	2,980	3,060	3,200	3,350
Physical sciences .....	2,455	3,045	3,593	4,312	4,090	4,040	4,040	4,030	4,140	4,350	4,530
Biological sciences .....	1,625	2,097	2,734	3,289	3,650	3,350	3,580	3,770	3,870	4,060	4,240
Agriculture & natural resources .....	668	716	800	1,004	970	830	910	960	1,000	1,060	1,120
Health professions .....	192	251	243	357	440	470	510	720	740	780	810
Accounting .....	21	34	33	56	50	60	60	70	70	70	70
Other business & management .....	260	368	427	566	850	1,060	1,220	1,330	1,370	1,440	1,500
Education .....	2,330	3,034	4,076	5,630	7,040	7,500	8,390	10,100	10,400	10,350	10,790
Other <sup>2</sup> .....	338	386	434	559	730	750	800	880	890	950	980
<b>Total</b> .....	<b>10,190</b>	<b>13,047</b>	<b>16,306</b>	<b>21,007</b>	<b>22,780</b>	<b>22,650</b>	<b>24,230</b>	<b>26,220</b>	<b>26,960</b>	<b>27,750</b>	<b>28,960</b>

## First-Professional Degrees

	1963-64	1965-66	1967-68	1969-70	1971-72	1973-74 <sup>1</sup>	1975-76	1977-78	1979-80	1981-82	1983-84
<b>All fields</b>											
Medicine .....	7,303	7,673	7,944	8,314	9,250	11,400	12,600	13,600	14,000	14,200	14,400
Dentistry .....	3,180	3,247	3,422	3,718	3,860	4,600	5,000	5,100	5,300	5,400	5,500
Other health professions <sup>1</sup> .....	1,624	1,834	2,153	2,372	2,680	3,000	3,300	3,500	3,700	3,900	4,100
Law .....	10,868	13,481	16,916	15,445	21,760	29,000	29,900	31,400	32,100	32,700	33,300
Theology and other .....	4,692	4,564	4,352	5,975	5,850	6,100	6,300	6,500	6,700	6,900	7,100
<b>Total</b> .....	<b>27,667</b>	<b>30,799</b>	<b>34,787</b>	<b>35,724</b>	<b>43,410</b>	<b>54,100</b>	<b>57,100</b>	<b>60,100</b>	<b>61,800</b>	<b>63,100</b>	<b>64,400</b>

NOTE: Figures for the years 1975-84 are projected.

1—Estimated.

2—Includes: home economics, law, military sciences, theology, and interdisciplinary studies.

3—Includes: chiropody or podiatry, optometry, osteopathy, and veterinary medicine.

Table 13

Opening Fall Enrollments in 1974, 1975, and 1976<sup>1</sup>

	Total enrollment for all institutions	Publicly controlled institutions				First-time students	Privately controlled institutions				First-time students
		All students					All students				
		Men		Women			Men		Women		
		Full-time	Part-time	Full-time	Part-time		Full-time	Part-time	Full-time	Part-time	
All institutions											
1974 .....	10,321,539	2,723,805	1,642,164	2,057,391	1,626,235	1,935,838	995,930	345,154	705,343	205,517	457,031
1975 .....	11,290,719	2,958,629	1,875,060	2,220,075	1,842,257	2,067,860	1,006,531	358,403	737,661	292,103	475,632
1976 .....	11,215,111	2,801,910	1,810,248	2,290,040	1,898,724	2,152,842	989,450	349,638	771,899	303,202	558,352
1975-76 change .....	-0.7%	-5.3%	-3.5%	+3.2%	+3.1%	+4.1%	-1.7%	-2.4%	+4.6%	+3.5%	+17.4%
1974-76 change .....	+8.7%	+2.9%	+10.2%	+11.3%	+16.8%	+11.2%	+3.5%	+1.3%	+9.4%	+14.2%	+22.2%
Universities											
1974 .....	2,728,348	911,340	252,758	636,973	231,694	305,597	309,312	119,883	177,790	88,593	90,800
1975 .....	2,863,985	934,627	283,866	662,736	263,711	315,950	306,146	124,533	185,435	97,931	93,048
1976 .....	2,816,135	911,829	267,421	675,168	255,735	348,496	303,591	114,533	193,541	94,317	120,741
1975-76 change .....	-1.7%	-2.4%	-5.8%	+1.9%	-4.8%	+10.3%	-0.8%	-8.0%	+4.4%	-3.7%	+29.8%
1974-76 change .....	+3.2%	+0.1%	+5.8%	+6.0%	+10.4%	+14.0%	-1.8%	-4.5%	+8.9%	+6.5%	+24.7%
Other 4-year institutions											
1974 .....	4,164,549	973,636	446,970	828,462	468,891	447,859	602,050	208,253	473,339	162,948	296,902
1975 .....	4,424,764	1,028,396	482,682	877,393	506,613	463,787	647,216	210,639	492,326	179,499	310,160
1976 .....	4,420,942	997,055	468,823	890,380	509,267	481,932	633,246	212,876	516,752	192,523	363,643
1975-76 change .....	-0.1%	-3.0%	-2.9%	+1.5%	+0.5%	+3.9%	-2.2%	+1.1%	+5.0%	+7.3%	+17.2%
1974-76 change .....	+0.2%	+2.4%	+4.9%	+7.5%	+8.6%	+7.6%	+5.2%	+2.2%	+9.2%	+18.1%	+22.5%
Two-year institutions											
1974 .....	3,428,642	838,629	942,436	591,956	925,650	1,182,362	44,508	17,018	54,214	13,971	63,329
1975 .....	4,001,970	995,606	1,103,512	679,946	1,066,933	1,288,123	53,169	23,231	59,900	14,673	72,484
1976 .....	3,978,034	893,026	1,074,004	724,492	1,133,702	1,322,414	52,613	22,229	61,606	16,362	73,968
1975-76 change .....	-0.6%	-10.3%	-3.1%	+6.6%	+6.3%	+2.7%	-1.0%	-4.3%	+2.8%	+11.5%	+2.0%
1974-76 change .....	+16.0%	+6.5%	+14.0%	+22.4%	+22.5%	+11.8%	+18.1%	+30.6%	+13.6%	+17.1%	+16.8%

<sup>1</sup>Jack Margarell, "Number of Students Declines for First Time Since 1951," The Chronicle of Higher Education, XIII, No. 23 (February 22, 1977), 6.

Table 14  
Typology of Learners<sup>1</sup>

Dimension	Students	
	Traditional	Non-traditional
Age of student	18-22 years	ca 20-80 years
Age of range for learning	ca 5 years	ca 40-50 years
Career objective or orientation	initial or introductory	second or concluding
Economic status	parent dependent	independent self-supporting
Educational mobility	open	limited to local area
Educational objectives	career	varied (career, leisure, self-development, etc.)
Employment background	limited, short-term	diverse, frequently rich
Learning mode	group	independent
Learning resource	formal schooling	formal schooling plus work-life
Previous educational attainment	high school graduate	varies: less than high school graduate through post-doctoral
Psycho-social development	in transition narrow band	evolving--wide band

<sup>1</sup>I. B. Hamilton, *The Third Century: Post Secondary Planning for the Nontraditional Learner* (Princeton: Educational Testing Service, 1976), pp. 16-17.

Table 15

Interest Areas of the Population (Iowa and CNS National)<sup>1</sup>

Percent of Interest					
<u>Professional fields</u>	<u>Iowa</u> (N=281)	<u>CNS</u> (N=3001)	<u>Vocational Subjects cont.</u>	<u>Iowa</u> (N=281)	<u>CNS</u> (N=3001)
Architecture	13	6	Medical Technology	7	10
Education	12	10	Real Estate, Insurance	10	*
Engineering	12	9	Salesmanship, Marketing	9	7
Fine and Performing Arts	22	16	Taxation	14	*
Law	8	12	Technical Skills	14	19
Library Science	2	*			
Management	15	16	<u>Personal Development</u>		
Medicine, Dentistry	7	5	Occult Sciences	6	7
Nursing	12	13	Personal Psychology	16	15
			Phys. Fitness/Self Def.	24	26
<u>Vocational Subjects</u>			Public Speaking	9	11
Agriculture	13	11	Religious Studies	13	15
Business Skills	26	26			
Commercial ART	15	12	<u>General Education</u>		
Communications Media	17	*	Basic Education	12	13
Computing Sciences	15	14	Biological Sciences	12	8
Cosmetology, barbering	7	10	Creative Writing	12	13
Forestry	15	*	English Language	5	8
Industrial Trades	19	22	Environmental Studies	15	15
Investment	19	29	Great Books	9	11
Labor & Industrial Rel.	8	*	History	15	*

\*Not asked in the CNS Survey

<sup>1</sup>Ibid., p. 35.

Table 15 (Continued)

<u>Percent of Interest</u>					
<u>General Education cont.</u>	<u>Iowa</u> (N=281)	<u>CNS</u> (N=3001)	<u>Public Affairs</u>	<u>Iowa</u> (N=281)	<u>CNS</u> (N=3001)
Humanities	15	16	Citizenship	7	4
Languages	17	16	Community Organizations & Prob.	15	14
Physical Sciences	6	6	Consumer Education	20	15
Religious Studies	13	15	Public Affairs	16	12
Social Studies	16	9	Public and City Services	6	*
<u>Home and Family Living</u>			Other Choice	4	3
Child Development	22	17			
Gardening	30	26			
Home & Appliance Repair	22	25			
Safety, First Aid	13	16			
Sewing, Home Crafts	25	27			
<u>Hobbies and Recreation</u>					
Crafts	33	27			
Flight Training	15	11			
Sports and Games	25	28			

\*Not asked in the CNS Survey.

Table 16

Estimated Demand for Further Education  
Iowa, 1975<sup>1</sup>

Statement	Percent	Estimated Adult Population Represented
Yes, would like to engage in further learning and definitely plan to do so.	12	225,600
Yes, would like to engage in further learning but have no definite plans yet.	18	338,400
Possibly, but difficulties would have to be overcome.	6	112,800
Total expressing interest.	36	676,800

<sup>1</sup>Ibid., p. 30.



Table 17

First Choice Subject Areas  
(Iowa and CNS Samples)<sup>1</sup>

Areas	<u>Percent</u>	
	Iowa Sample	CNS' Sample
Vocational Subjects	36	35
Professional Fields	25	19
General Education	12	16
Home and Family Living	11	12
Hobbies and Recreation	8	8
Personal Development	3	5
Public Affairs	3	4
Other Choice	2	1
Total	100	100

<sup>1</sup>Ibid., p. 36.

Table 18

Preferred Models of Change (Rated by Experts and Specialists in Educational Change at The Michigan Conference)<sup>1</sup>

	<u>Rank</u>			
	1	2	3	4
Research Development and Diffusion	7	6	17	10
Social Interaction	3	8	12	21
Problem-Solving	8	19	11	7
Linkage	25	11	7	1
Other*	7			

\*Fourteen participants suggested alternative models, although only seven chose to rank them. Ofiesh proposed a "contingency management" model. Tye suggested a "political systems" approach. Dorrs emphasized the need for a conflict-crisis model. Other suggestions were on the order of over-arching syntheses (e.g., Gephart) or modifications of those offered (e.g., Lake: "systems problem-solving and organization development").

<sup>1</sup>R. G. Havelock and M. C. Havelock, eds., Training for Change Agents: A Guide to the Design of Training Programs in Education and Other Fields (Ann Arbor: Lithor Crafters, Inc., 1973), p. 38.

Table 19

Year-to-Year Changes in Total  
College Enrollment<sup>1</sup>

Fall	Public	Private	Total
1966	+ 9.6%	+ 4.6%	+ 7.9%
1967	+11.2%	+ 2.7%	+ 8.2%
1968	+12.8%	- 0.7%	+ 8.7%
1969	+ 8.6%	+ 1.2%	+ 6.5%
1970	+ 9.0%	+ 2.1%	+ 7.2%
1971	+ 5.9%	- 0.4%	+ 4.3%
1972	+ 3.9%	0.0%	+ 3.0%
1973	+ 4.9%	+ 1.8%	+ 4.2%
1974	+ 7.7%	+ 2.4%	+ 6.5%
1975	+11.4%	+ 7.1%	+10.4%
1976*	0.0%	+ 1.9%	+ 0.4%

\*Estimates based on sample survey. Source: National  
Center for Education Statistics

<sup>1</sup>Jack Margarell, "Public College Enrollment Growth  
Appears to be at a Standstill," The Chronicle of Higher  
Education, XIII, No. 12 (November 22, 1976), 3.

Table 20

Current Status and Potential Future  
of Instructional Improvement<sup>1</sup>

Current Status	Potential Future
Few institutions have programs	Most institutions have programs
Few faculty are involved	All or most faculty are involved
Participants are primarily volunteers	Participants feel some external pressure to participate
Faculty participation is limited and irregular	Faculty participation is regular and continuous
Participation is an "overload"	Participation is provided for in normal workload
In-service development is a peripheral activity	In-service development is a central activity
Budgets and resources are modest	Budgets and resources are adequate
"Soft" grant monies are a major source of funds	"Hard" institutional monies are the major source of funds
Few institutional policies support teaching effectiveness or professional development	Many policies support teaching effectiveness and professional development
Few permanent instructional-improvement centers conduct professional development	Instructional-improvement centers providing professional development are permanent

<sup>1</sup>J. G. Gaff, Toward Faculty Renewal (San Francisco: Jossey-Bass Publishers, 1975), p.178.

Table 20 (Continued)

Current Status	Potential Future
Few staff members have training and experience in consulting with colleagues	Many staff members have training and experience in consulting with colleagues
Little evidence of effectiveness of program exists	Convincing evidence of effectiveness exists
Impact of limited to selected institutions and faculty members	Impact is widespread among institutions and faculty
Modest reforms aimed at better teaching are underway	Extensive improvements in instruction and organization operations are made

Table 21

Use and Estimated Effectiveness of Institution-Wide  
Policies or Practices in Development<sup>1</sup>

	(N=756)								Unused practices considered essential (percentage responding) <sup>b</sup>
	Percentage of institu- tions at which the practice existed				Percentage indicating practice was effective or very effective <sup>a</sup>				
	All (N=756)	2-yr. (326)	4-yr. (315)	Univ. (93)	All	2-yr.	4-yr.	Univ.	
1. Annual awards to faculty for excellence in teaching	38	20	44	79	28	37	24	27	6
2. Circulation of newsletter articles, etc., that are pertinent to teaching improvement or faculty development	68	71	65	67	27	32	22	25	3
3. A specific calendar period is set aside for professional development	44	62	33	14	52	52	55	38	5
4. There is a periodic review of the performance of all faculty members, whether tenured or not	78	87	71	77	59	63	56	49	4
5. Sabbatical leaves with at least half salary	67	60	72	82	66	60	73	61	5
6. A policy of unpaid leaves that covers educational or development programs	72	70	73	80	51	47	55	49	1
7. Lighter than normal teaching load for first year faculty	21	15	23	25	53	64	51	45	6
8. Temporary teaching load reductions to work on a new course, major course revision, or research area	61	58	59	81	64	68	63	59	8
9. Travel grants to refresh or update knowledge in a particular field	52	46	56	61	64	67	64	57	4
10. Travel funds available to attend professional conferences	93	95	92	95	62	69	59	51	1
11. Visiting scholars program that brings people to the campus for short or long periods	55	37	65	86	57	60	57	54	3
12. Summer grants for projects to improve instruction or courses	58	61	56	62	70	72	66	74	5
13. There is a campus committee on faculty development	61	63	60	62	50	55	48	46	5

<sup>a</sup>Percentages based only on institutions at which practice existed.

<sup>b</sup>Percentages are based on all institutions (N=756).

<sup>1</sup>J. A. Centra, "Survey of Faculty Development Practices,"  
Faculty Development and Evaluation in Higher Education, II,  
No. 3 (Fall, 1976), 4.

Table 22

Estimated Use and Effectiveness: Analysis of Assessment Practices,  
by Type of Institution<sup>1</sup>

(Two-Year Colleges, N=326; Four-Year Colleges, N=315; Universities, N=93)							
Analysis or Assessment Practices	Estimated Extent of Faculty Use <sup>a</sup>						Estimated Effectiveness <sup>b</sup> (percentage indicating effective or very effective)
	Type of inst.	Not used	Fewer than 5%	5-20%	20-50%	Over 50%	
1. Systematic ratings or instruction by students used to help faculty improve	2-yr.	4	6	10	13	67	58
	4-yr.	3	3	9	16	69	46
	Univ.	1	4	14	12	69	32
2. Formal assessments by colleagues for teaching or course improvement	2-yr.	34	14	11	13	27	55
	4-yr.	38	21	13	8	18	42
	Univ.	23	32	24	13	8	33
3. Informal assessments by colleagues for teaching or course improvement	2-yr.	30	18	19	16	14	47
	4-yr.	20	19	26	19	12	39
	Univ.	11	32	28	18	10	24
4. Systematic teaching or course evaluations by an administrator for improvement purposes	2-yr.	19	7	10	15	48	60
	4-yr.	46	9	12	5	24	45
	Univ.	41	23	15	3	16	41
5. System for faculty to assess their own strengths & areas needing improvement	2-yr.	24	9	12	12	40	61
	4-yr.	39	11	13	10	25	53
	Univ.	38	21	18	8	16	53

<sup>1</sup>Ibid., p. 5.

Table 22 (Continued)

Analysis or Assessment Practices	Estimated Extent of Faculty Use <sup>a</sup>						Estimated Effectiveness <sup>b</sup> (percentage indicating effective or very effective)
	Type of inst.	Not used	Fewer than 5%	5-20%	20-50%	Over 50%	
6. Classroom visitation by an instructional resource person upon request, followed by a diagnosis of teaching	2-yr.	59	19	11	4	5	56
	4-yr.	71	19	5	1	1	53
	Univ.	42	52	5	1	0	37
7. Analysis of in-class video tapes to improve instruction	2-yr.	42	33	16	4	2	66
	4-yr.	45	35	14	3	1	54
	Univ.	27	61	10	0	1	54
8. Faculty with expertise consult with other faculty on teaching or course improvement	2-yr.	28	25	24	13	8	64
	4-yr.	33	27	22	13	3	57
	Univ.	27	44	19	10	0	61
9. "Master teachers" or senior faculty work closely with new or apprentice teachers	2-yr.	47	18	18	7	8	62
	4-yr.	62	19	8	6	3	56
	Univ.	51	29	16	2	1	52
10. Professional and personal development plan (growth contract) for individual faculty members	2-yr.	55	7	7	5	23	71
	4-yr.	69	12	8	3	5	56
	Univ.	68	17	7	2	3	44

<sup>a</sup>For each item the "no response" rate was between 1 and 3 percent.

<sup>b</sup>Percentages based only on institutions at which practice existed.



Table 23

Percentage Distribution of Educational and General Revenues, 1970-71 through 1974-75<sup>1</sup>

	Data from HEGIS Reports		Data from Audited Financial Statements		Drake 1974-75
	1970-71	1973-74	1973-74	1974-75	
Doctoral-Granting Universities					
Tuitons and fees	63%	64%	57%	56%	
Governmental appropriations, grants and contracts	10	10	19	19	
Private gifts and grants	6	6	12	12	
Endowment income	5	5	5	5	
Other	16	15	7	7	
Total, E and G Revenues	100%	100%	100%	100%	
Comprehensive Universities and Colleges					
Tuitons and fees	81%	76%	74%	73%	78.1%
Governmental appropriations, grants, and contracts	3	7	10	11	8.7
Private gifts and grants	5	6	8	8	8.0
Endowment income	5	4	4	4	1.9
Other	6	7	4	4	3.2
Total, E and G Revenues	100%	100%	100%	100%	100%

<sup>1</sup>Mildred Steele, "A Report for the North Central Association of Colleges and Secondary Schools, Vol. 1" (Des Moines, Iowa: Drake University, November, 1976), p. 2.21i. (Mimeographed.)

Table 23 (Continued)

	Data from HEGIS Reports		Data from Audited Financial Statements		Drake 1974-75
	1970-71	1973-74	1973-74	1974-75	
Liberal Arts Colleges I					
Tuitions and fees	67%	67%	63%	63%	
Governmental appropriations, grants and contracts	1	1	4	5	
Private gifts and grants	11	12	14	13	
Endowment income	15	14	14	13	
Other	6	6	5	6	
Total, E and G Revenues	100%	100%	100%	100%	
Liberal Arts Colleges II					
Tuitions and fees	69%	65%	64%	62%	
Governmental appropriations, grants and contracts	3	3	11	12	
Private gifts and grants	14	15	17	17	
Endowment income	6	5	3	4	
Other	8	12	5	5	
Total, E and G Revenues	100%	100%	100%	100%	
Four Types of institutions combined					
Tuitions and fees	71%	68%	64%	63%	
Governmental appropriations, grants and contracts	6	8	14	15	
Private gifts and grants	6	7	11	11	
Endowment income	6	5	5	5	
Other	11	12	6	6	
Total, E and G Revenues	100%	100%	100%	100%	

NOTE: Because of different classification systems, the data from HEGIS reports are not precisely comparable to those from audited financial statements.

Table 24

Percentage Distribution of Educational and General Expenditures,  
1970-71 through 1974-75<sup>1</sup>

	Data from HEGIS Reports		Data from Audited Financial Statements		Drake
	1970-71	1973-74	1973-74	1974-75	1974-75
<b>Doctoral-Granting Universities</b>					
Instruction and departmental research	45%	44%	43%	44%	
Sponsored research	--	--	14	13	
Libraries	5	5	4	4	
Student services	--	--	5	5	
General administration	--	--	5	5	
General institutional support	--	--	10	10	
Administration sub-total	20	21	20	20	
Plant operation and maintenance	11	9	9	9	
Student aid	9	8	8	8	
Other	10	13	2	2	
Total	100%	100%	100%	100%	
<b>Comprehensive Universities and Colleges</b>					
Instruction and departmental research	44%	44%	44%	43%	48.4%
Sponsored research	--	--	6	6	2.2
Libraries	5	4	4	4	4.8
Student services	--	--	6	6	8.7
General administration	--	--	6	6	5.9
General institutional support	--	--	11	11	9.6
Administration sub-total	24	24	23	23	24.2
Plant operation and maintenance	11	11	10	11	9.7
Student aid	10	11	11	11	8.5
Other	6	6	2	2	2.2
Total	100%	100%	100%	100%	100%

<sup>1</sup>Steele, op. cit., p. 221j.

Table 25  
Faculty Unionization<sup>1</sup>

Results of elections  
so far this academic year

Heavy type indicates newly reported elections.	4-Year College Elections		2-Year College Elections	
	Entered	Won	Entered	Won
American Assn. of Univ. Professors ... Four-year colleges: Loma Mountain Col- lege,* Cal.	7	1	1	0
American Federation of Teachers .... Four-year colleges: Illinois Board of Gov- ernors System-5 campuses; Park College,* Mo. Two-year colleges: Cottey College,* Mo.; El Camino Community College, Cal.; Los Angeles Community College District-9 campuses	7	2	4	3
National Education Association ..... Four-year colleges: University of Massa- chusetts-2 campuses. Two-year colleges: Western Iowa Techni- cal College.	5	1	2	1
Independent and Other .....	3	0	0	0
A.A.U.P.-N.E.A. .... Four-year colleges: University of Northern Iowa	1	1	0	0
No Bargaining Agent ..... Four-year colleges: Butler University,* Ind. (no agent, 74; N.E.A., 46); Eastern Oregon State College, Institute of Food and Agricultural Sciences, University of Florida; Merrimack College,* Mass.; University of Oregon; Stephens College,* Mo.; Waynes- burg College,* Pa. Two-year colleges: Lasell Junior College,* Mass.	—	7	—	1

Asterisk (\*) indicates a private institution.

Recent contract settlements

Following are summaries of recent collective-bargaining agreements between colleges and their faculty unions. The initials of the national union appear in parentheses after the institution's name.

**Brooklyn Center of Long Island University (A.F.T.):** Under a three-year contract retroactive to Sept. 1, 1976, minimum salaries have been increased and faculty members will receive across-the-board increases of \$825 per year, plus additional increases depending on enrollment. The agreement averted a threatened strike.

**Nassau Community College, N.Y. (A.F.T.):** Under a three-year contract retroactive to Sept. 1, 1976, salaries will increase 6 per cent each of the first two years and a cost-of-living increase in the third, as well as their normal pay raises. The contract also included an early retirement plan beginning at age 55, improvements in fringe benefits, and continuation of the governing powers of the academic senate, departments, and college promotion and tenure committee.

<sup>1</sup>"Faculty Unionization, The Chronicle of Higher Education, XIV, No. 2 (March 7, 1977), 2.

Table 26  
Faculty Members with Tenure, 1975-76<sup>1</sup>

	<u>All institutions</u>			<u>Public institutions</u>			<u>Private institutions</u>		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Alabama .....	53.2%	45.6%	50.4%	53.5%	49.8%	52.1%	52.2%	30.8%	44.5%
Alaska .....	32.3%	14.1%	26.6%	33.4%	14.4%	27.4%	--	--	--
Arizona .....	29.5%	27.8%	29.1%	29.2%	26.9%	28.7%	43.1%	51.5%	45.7%
Arkansas .....	55.8%	41.3%	51.8%	59.2%	43.4%	54.7%	43.5%	31.3%	40.7%
California .....	73.3%	60.5%	70.5%	77.6%	64.5%	74.7%	51.2%	34.1%	48.1%
Colorado .....	61.8%	37.3%	57.2%	61.3%	36.8%	56.8%	64.9%	39.7%	59.2%
Connecticut .....	64.2%	47.3%	60.3%	74.9%	62.3%	71.4%	57.8%	33.0%	52.9%
Delaware .....	44.7%	14.4%	35.7%	44.5%	11.0%	35.0%	47.1%	38.1%	43.0%
District of Columbia .....	49.6%	34.6%	45.2%	28.4%	26.2%	27.6%	54.9%	38.0%	50.3%
Florida .....	61.1%	49.7%	58.2%	63.6%	52.2%	60.6%	48.9%	33.2%	45.7%
Georgia .....	48.7%	28.9%	43.4%	48.8%	25.9%	42.9%	48.4%	37.6%	45.1%
Hawaii .....	71.5%	50.2%	65.7%	72.0%	50.3%	66.2%	55.6%	47.1%	52.8%
Idaho .....	53.4%	32.7%	49.6%	54.0%	31.1%	49.8%	46.7%	50.0%	47.4%
Illinois .....	64.1%	47.7%	60.3%	66.2%	50.2%	62.2%	59.4%	40.1%	55.7%
Indiana .....	59.7%	38.4%	55.3%	61.8%	40.7%	57.2%	54.8%	31.5%	50.6%
Iowa .....	52.7%	29.9%	47.4%	53.4%	28.8%	47.5%	51.3%	32.4%	47.0%
Kansas .....	56.8%	35.3%	52.1%	59.0%	37.6%	54.4%	43.4%	23.8%	38.5%
Kentucky .....	57.3%	41.8%	53.5%	59.0%	42.1%	55.1%	49.1%	41.0%	46.7%
Louisiana .....	62.8%	47.4%	58.4%	64.4%	49.4%	60.0%	55.1%	36.1%	50.0%
Maine .....	53.6%	29.2%	48.8%	57.6%	30.3%	52.2%	45.6%	27.0%	41.9%

<sup>1</sup>Gwaltney, op. cit., p. 182.

Table 26 (Continued)

	All institutions			Public institutions			Private institutions		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Maryland .....	56.7%	41.3%	52.3%	59.4%	45.2%	55.3%	47.8%	25.4%	42.3%
Massachusetts .....	59.0%	39.4%	54.4%	70.3%	50.3%	64.9%	52.9%	31.6%	48.3%
Michigan .....	68.8%	50.3%	64.8%	72.2%	55.4%	68.7%	49.4%	26.6%	43.8%
Minnesota .....	58.5%	36.0%	53.6%	57.9%	33.2%	52.7%	59.8%	40.5%	55.1%
Mississippi .....	36.8%	22.4%	31.9%	35.1%	20.7%	30.2%	52.4%	37.5%	47.3%
Missouri .....	56.5%	35.7%	51.5%	56.1%	34.4%	51.2%	57.3%	38.0%	52.2%
Montana .....	63.0%	39.1%	58.6%	63.2%	43.0%	59.8%	60.7%	20.6%	49.6%
Nebraska .....	56.2%	28.8%	49.9%	55.3%	26.8%	48.7%	59.6%	36.7%	54.5%
Nevada .....	61.4%	47.8%	58.9%	61.4%	47.8%	58.9%	--	--	--
New Hampshire .....	59.0%	37.4%	54.7%	71.2%	50.7%	67.5%	44.4%	25.3%	40.2%
New Jersey .....	68.5%	54.2%	64.6%	70.8%	58.7%	67.0%	64.4%	38.6%	59.4%
New Mexico .....	58.3%	33.2%	52.7%	59.6%	32.2%	54.1%	40.7%	37.7%	39.4%
New York .....	58.8%	41.1%	54.9%	47.2%	44.0%	54.4%	60.4%	38.4%	55.3%
North Carolina .....	46.5%	28.9%	41.2%	41.2%	23.6%	35.8%	60.7%	46.3%	56.8%
North Dakota .....	51.5%	40.1%	48.8%	53.0%	44.1%	51.0%	27.1%	10.8%	20.8%
Ohio .....	50.5%	35.5%	47.3%	47.4%	35.2%	44.8%	57.3%	36.2%	52.8%
Oklahoma .....	57.1%	38.4%	52.5%	60.2%	41.4%	55.6%	44.9%	26.5%	40.4%
Oregon .....	66.8%	48.3%	62.9%	70.4%	51.1%	66.2%	50.8%	32.1%	47.6%
Pennsylvania .....	64.8%	45.5%	60.8%	67.6%	49.0%	63.5%	61.2%	40.0%	57.1%
Rhode Island .....	59.6%	36.8%	54.2%	62.3%	41.7%	56.2%	56.4%	24.2%	51.4%
South Carolina .....	39.4%	18.9%	33.9%	37.2%	14.5%	31.1%	48.4%	36.6%	45.2%
South Dakota .....	63.0%	39.5%	57.9%	69.9%	51.7%	66.5%	40.7%	18.9%	34.0%
Tennessee .....	56.0%	37.0%	51.2%	54.4%	39.0%	50.6%	59.8%	32.5%	52.7%
Texas .....	51.9%	34.0%	47.2%	51.2%	33.4%	46.6%	54.7%	36.5%	50.3%
Utah .....	67.4%	42.3%	63.2%	67.8%	43.4%	63.7%	52.6%	23.8%	42.4%

Table 26 (Continued)

	All institutions			Public institutions			Private institutions		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Vermont .....	53.0%	28.4%	47.1%	63.1%	39.3%	57.6%	41.7%	17.4%	35.6%
Virginia .....	49.5%	36.4%	46.1%	48.0%	35.6%	44.9%	55.7%	39.1%	51.0%
Washington .....	72.4%	57.9%	69.2%	75.2%	61.7%	72.3%	53.8%	36.5%	49.6%
West Virginia .....	60.1%	44.2%	55.8%	61.9%	45.2%	57.5%	50.9%	39.7%	47.6%
Wisconsin .....	65.2%	44.9%	60.7%	66.4%	48.1%	62.4%	58.9%	28.8%	52.0%
Wyoming .....	56.1%	44.9%	54.0%	56.1%	44.9%	54.0%	--	--	--
Total .....	59.5%	41.7%	55.3%	61.0%	43.8%	58.8%	55.7%	35.6%	51.1%

**APPENDIX B**

**INSTITUTIONAL GOAL INVENTORY GOAL AREAS**

**AND PROFILE CHART**



## OUTCOME GOALS

**Academic Development**—this goal has to do with acquisition of general and specialized knowledge, preparation of students for advanced scholarly study, and maintenance of high intellectual standards on the campus. (1,4,6,9)\*

**Intellectual Orientation**—this goal area relates to an *attitude* about learning and intellectual work. It means familiarity with research and problem solving methods, the ability to synthesize knowledge from many sources, the capacity for self-directed learning, and a commitment to lifelong learning. (2,5,7,10)

**Individual Personal Development**—this goal area means identification by students of personal goals and development of means for achieving them, enhancement of sense of self-worth and self-confidence. (3,8,11,13)

**Humanism/Altruism**—this goal area reflects a respect for diverse cultures, commitment to working for world peace, consciousness of the important moral issues of the time, and concern about the welfare of man generally. (14,17,20,23)

**Cultural/Aesthetic Awareness**—this goal area entails a heightened appreciation of a variety of art forms, required study in the humanities or arts, exposure to forms of non-Western art, and encouragement of active student participation in artistic activities. (15,18,21,24)

**Traditional Religiousness**—this goal area is intended to mean a religiousness that is orthodox, doctrinal, usually sectarian, and often fundamental—in short, *traditional* rather than “secular” or “modern.” (16,19,22,25)

**Vocational Preparation**—this goal area means offering: specific occupational curriculums (as in accounting or nursing), programs geared to emerging career fields, opportunities for retraining or upgrading skills, and assistance to students in career planning. (26,30,36,38)

**Advanced Training**—this goal area can be most readily understood simply as the availability of postgraduate education. It means developing and maintaining a strong and comprehensive graduate school, providing programs in the professions, and conducting advanced study in specialized problem areas. (27,31,32,41)

**Research**—this goal area involves doing contract studies for external agencies, conducting basic research in the natural and social sciences, and seeking generally to extend the frontiers of knowledge through scientific research. (28,34,35,37)

**Meeting Local Needs**—this goal area is defined as providing for continuing education for adults, serving as a cultural center for the community, providing trained manpower for local employers, and facilitating student involvement in community-service activities. (29,33,39,40)

**Public Service**—this goal area means working with governmental agencies in social and environmental policy formation, committing institutional resources to the solution of major social and environmental problems, training people from disadvantaged communities, and generally being responsive to regional and national priorities in planning educational programs. (44,47,50,51)

\*The numbers in parentheses are the four Goal Statements that make up each Goal Area.

**Social Egalitarianism**—this goal area has to do with open admissions and meaningful education for all admitted, providing educational experiences relevant to the evolving interests of minority groups and women, and offering remedial work in basic skills. (42,45,48,52)

**Social Criticism/Activism**—this goal area means providing criticisms of prevailing American values, offering ideas for changing social institutions judged to be defective, helping students learn how to bring about change in American society, and being engaged, as an institution, in working for basic changes in American society. (43,46,49,53)

## PROCESS GOALS

**Freedom**—this goal area is defined as protecting the right of faculty to present controversial ideas in the classroom, not preventing students from hearing controversial points of view, placing no restrictions on off-campus political activities by faculty or students, and ensuring faculty and students the freedom to choose their own life styles. (54,57,60,63)

**Democratic Governance**—this goal area means decentralized decision-making arrangements by which students, faculty, administrators, and governing board members can all be significantly involved in campus governance; opportunity for individuals to participate in all decisions affecting them; and governance that is genuinely responsive to the concerns of everyone at the institution. (55,58,61,64)

**Community**—this goal area is defined as maintaining a climate in which there is faculty commitment to the general welfare of the institution, open and candid communication, open and amicable airing of differences, and mutual trust and respect among students, faculty, and administrators. (56,59,62,65)

**Intellectual/Aesthetic Environment**—this goal area means a rich program of cultural events, a campus climate that facilitates student free-time involvement in intellectual and cultural activities, an environment in which students and faculty can easily interact informally, and a reputation as an intellectually exciting campus. (66,69,73,76)

**Innovation**—this goal area is defined as a climate in which continuous innovation is an accepted way of life; it means established procedures for readily initiating curricular or instructional innovations; and, more specifically, it means experimentation with new approaches to individualized instruction and to evaluating and grading student performance. (67,70,74,77)

**Off-Campus Learning**—this goal area includes time away from the campus in travel, work-study, VISTA work, etc.; study on several campuses during undergraduate programs; awarding degrees for supervised study off the campus; awarding degrees entirely on the basis of performance on an examination. (68,72,75,78)

**Accountability/Efficiency**—this goal area is defined to include use of cost criteria in deciding among program alternatives, concern for program efficiency, accountability to funding sources for program effectiveness, and regular submission of evidence that the institution is achieving stated goals. (79,81,83,87)

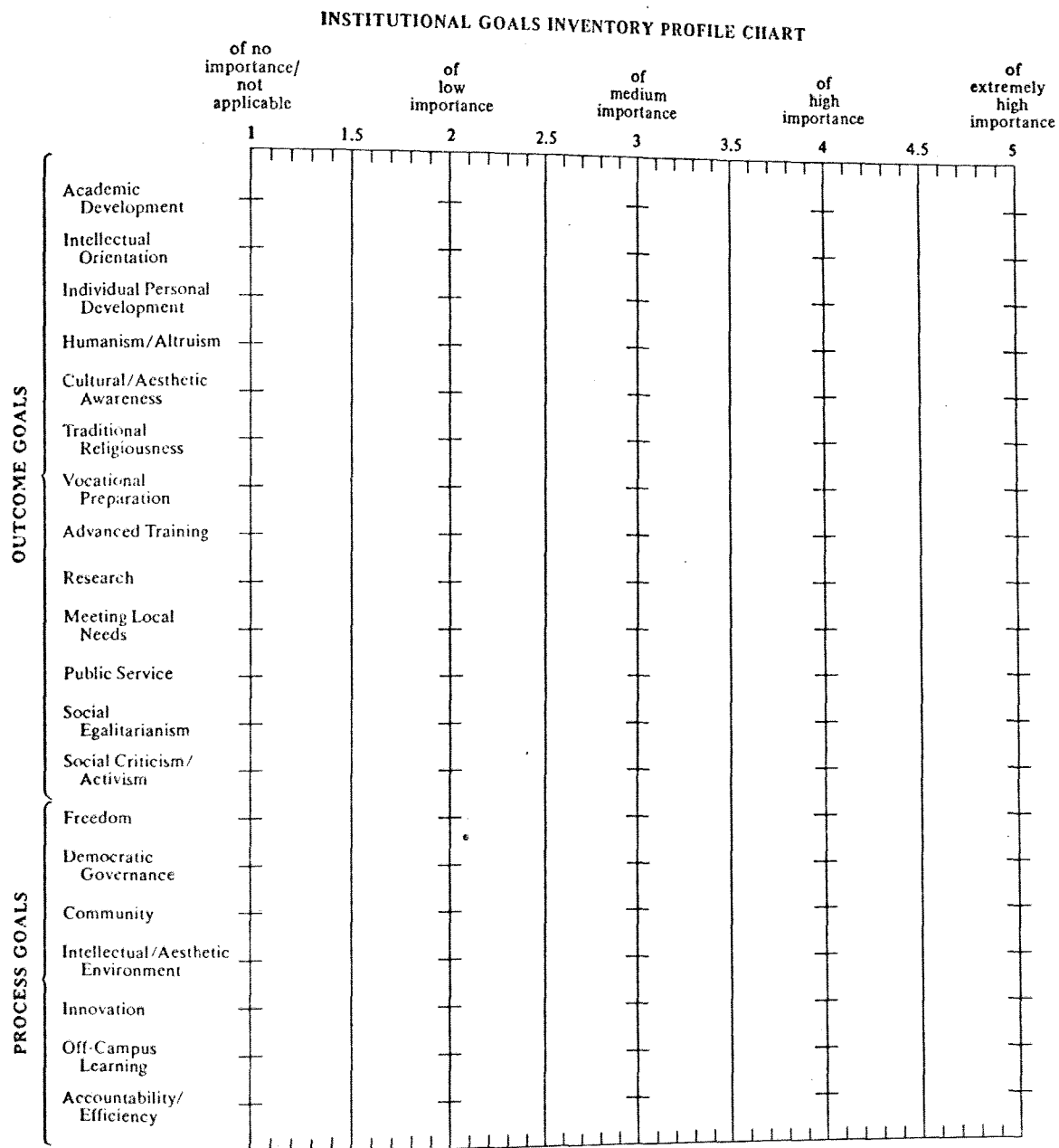
Miscellaneous goal statements not included in goal areas (12, 71, 80, 82, 84, 85, 86, 88, 89, 90)

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## Figure 29

Descriptions of the 20 Goal Areas in the  
Institutional Goals Inventory

PROFILE FOR \_\_\_\_\_



Institutional Goals Inventory  
 Institutional Research Program for Higher Education  
 Educational Testing Service, Princeton, New Jersey 08540

See other side for  
 descriptions of the  
 20 Goal Areas.

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Figure 30  
 Institutional Goals Inventory Profile Chart

## APPENDIX C

### PROJECT INSTRUMENTS

CAMPUS COMMUNICATION  
Drake University

To:

Date: Spring 1977

From:

Subject: Faculty Development Program: Workshops -  
Applications

The Faculty Development Program funded by the Northwest Area Foundation is designed to:

1. enhance the professional skills, vitality, productivity and innovations of the faculty, thereby improving student learning opportunities; and
2. improve the learning process by interrelating student needs and expectations with the teaching and advising methods of the faculty.

Additional goals have been identified through analysis of data accumulated over the past 2 years in a number of studies. To help meet these goals, workshops or seminars within the \$500 - \$1000 range may be designed by colleges, departments or groups.

If you wish to propose a specific workshop, you may:

1. fill in the attached application form, or
2. write a proposal following the general form as a guideline.

If you wish help in proposal preparation, please see the Program Advisory Committee member from your college or see the Coordinator, Prudence Dyer. Her office is Old Main 302. Telephone 271-3518.

Attached: (1) Application Form  
(2) Working Draft of University Needs, Goals identified from Drake Data Bank

Figure 31

Guidelines for Application<sup>1</sup>

<sup>1</sup>P. Dyer, "Guidelines for Application," Working Paper for the Faculty Development Program (Des Moines, Iowa: Drake University, Spring, 1977). (Xeroxed.)

1. Theme or goal of workshop or seminar.
2. Rationale or statement of need.  
Relation of need to identified goals.
3. Proposed time, length, location (if relevant).
4. Projected scope and appeal of workshop.
5. Suggestions for leadership or other resources.
6. Initial estimate or cost:
  - Leadership/Consultant(s) Honoraria \_\_\_\_\_
  - Travel expenses of Consultant(s) \_\_\_\_\_
  - Hospitality expenses of Consultant(s) \_\_\_\_\_
  - Materials, other resources \_\_\_\_\_
  - Other \_\_\_\_\_
7. Consider one or more objectives in each of the following categories.\*

<u>Behavioral Aspect</u>	<u>Content Area</u>
a. To develop knowledge about:	1. 2. 3.
b. To develop understanding of:	1. 2. 3.
c. To develop skill in:	1. 2. 3.
d. To develop attitudes toward:	1. 2. 3.
e. To develop values of:	1. 2. 3.

\*M. Knowles. 1975. Self-directed Learning: A guide for learners and teachers. Association Press, New York, p. 98.

8. Evaluation or specific follow-up plans.
9. PROPOSAL ENDORSEMENT: Proposals supported by Deans, Department Coordinator and general faculty and meeting above identified objectives have generally received the greatest support of the Faculty Advisory Committee for funding. Please indicate support of your proposal through appropriate accompanying signatures, letters, etc.

Figure 32

## Guidelines for Support for Faculty Development Program<sup>1</sup>

<sup>1</sup>P. Dyer and J. Gerlovich, "Guidelines for Support for Faculty Development Program," A Working Paper for the Faculty Development Program (Des Moines, Iowa: Drake University, Spring, 1977). (Xeroxed.)

Proposer(s)	Theme
0      1      2      3      4      5	0      1      2      3      4      5
<u>Desirable</u>	<u>Feasible</u>
<ul style="list-style-type: none"> <li>• has objectives designed to meet identified needs of program</li> <li>• proposes reasonable plan to achieve objectives</li> <li>• includes appropriate follow-up or evaluation procedures</li> </ul>	<ul style="list-style-type: none"> <li>• appeals to interests, needs of specific group(s) of faculty</li> <li>• stays within budget guidelines</li> <li>• endorsements</li> </ul> <div style="margin-left: 40px;"> Faculty Department Head _____  Dean _____ </div>
Accept _____	
Reject _____ Because _____	
Defer _____ Because _____	
Needs Group Discussion _____	
Needs Proposers Interpretation _____	
_____ Advisory Committee Member	

Figure 33

Advisory Committee Recommendation  
Form for Faculty Proposals

Date rec'd	From	Theme	Date sent to A.C.	Cost to F.D.P.	Recommendations Rec'd - Faculty Advisory Committee	Considerations	Disposition

Figure 34

Projects Proposals Log<sup>1</sup>

<sup>1</sup>P. Dyer, "Projects Proposals Log," A Working Paper for the Faculty Development Program (Des Moines, Iowa: Drake University, 1976-77). (Xeroxed.)

	Professional or Personal Goals	Instructional Methodology	Student Needs or Concerns	New Skills, Knowledge	Post- Disciplinary Programs	Program Evaluation	Other
LEVELS	Individual Faculty Member (Teaching)	Assertiveness Training, Male x Assertiveness Training, Female x					
	Department or "Clusters"	Alexander x Technique Tchg. Fresh. o Comp.		Seminar in o Student Tchg LASSCTE		Curric. Re- x view Speech Comm.	
	College	Tchg. Low o	ICI, CUES, NCHEMS, HILL, ACE				
	Groups within University			Qualitative x Methods in S.S.			Kanas City Regional: Instr. visit x Univ. of Wis Oshkosh visit x
	(Non- Teaching Faculty)						
	University Community		ICI, CUES, NCHEMS, HILL, ACE	Computers in o Instruction	Higher Ed. I x		

x - projects completed      0 - projects in progress

PROGRAMS FOR FACULTY DEVELOPMENT

Figure 35  
Projects Matrix<sup>1</sup>

<sup>1</sup>p. Dyer and J. Gerlovich, "Projects Matrix," A Working Paper for the Faculty Development Program (Des Moines, Iowa: Drake University, 1976-77). (Xeroxed.)



# SPECTRUM

NEWS OF THE DRAKE FACULTY DEVELOPMENT PROGRAM

Vol I, 1  
December 1976

## FACULTY DEVELOPMENT PROGRAM INITIATED

With a 3 year grant from N.W. Area Foundation for Faculty Development, Vice President of Academic Affairs, Hoke Smith, appointed Prudence Dyer as Coordinator. Faculty Advisory Committee (FAC) was selected through joint consultation of Coordinator and Vice President Smith. FAC consists of Larry Brown - Chemistry, Don Castleman - Law, Bill Coleman - Fine Arts, Doug Hillman - Business, Robert Largen - Journalism, David Robinson - Physics, Gary Russi - Pharmacy, Ann Schodde - Continuing Education, and Lloyd Stjernberg - Education. Also appointed were Research Intern Jack Gerlovich and Office Manager Pat Gerlovich.

## FACULTY DEVELOPMENT NEEDS IDENTIFIED

Baseline data for study included: American Council on Education (ACE), administered at Drake in 1975; National Center for Higher Education Management Systems (NCHEMS), National Norms and Drake Survey 1976; Drake's Summary Survey, Committee on Status of Profession 1976; Drake Hill Advisory Unit 1973-75; Literature Search; and Faculty Advisory Committee (FAC) suggestions.

GOALS SYNTHESIZED: from needs by Faculty Advisory Committee and Coordinator at three levels:

University Level: maintain Drake's reputation of academic excellence; maintain special professional/vocational programs; develop sensitivity to identified student needs; increase student retention through counseling (faculty/student interaction); encourage innovation within University goals; increase diversity of students; provide post-disciplinary opportunities for study, research, scholarship; augment opportunities being reduced through the diminishing purchasing powers for travel, replacement, research;

College Level: maintain faculty intellectual orientation; encourage faculty innovation within college goals; maintain special professional/vocational programs; increase growth in awareness and appreciation of the literature, music and other arts; increase diversity of students; increase intellectual/cultural environment; increase students' social growth through understanding of other people and their views; experience in relating to others; increase students' vocational/professional growth through preparation in traditional and emerging areas; increase interaction with Community; increase post-disciplinary interaction.

Individual Level: provide training and support groups for individuals wishing to renew old, or learn new skills; provide opportunities for individuals or groups to engage in advanced study, scholarship, research; provide practice in skills needed for personal development, behavior styles.

Drake University  
Des Moines, Iowa 50311

Figure 36

SPECTRUM Vol I, 1<sup>1</sup>

<sup>1</sup>J. Gerlovich and P. Dyer, SPECTRUM - News of the Drake Faculty Development Program (Drake University), I, No. 1 (December, 1976).

Figure 36 (Continued)

CONTINUING SEMINARS IN HIGHER EDUCATION

Howard Bowen, Chancellor of the Claremont University Center and "dean" of private higher education, will be the first of the campus consultants in the Faculty Development Program's Continuing Seminar in Higher Education. The sessions are scheduled February 3 and 4. Dr. Bowen will be discussing Outcomes in Private Higher Education, Enrollment Projections, and Trends in Adult Learning.

Each of the Seminars to be scheduled throughout the Spring will feature an outstanding leader in higher education, beginning with an orientation session open to all faculty, followed by small group sessions designed to address particular needs of the selected faculty groups.

Juanita Kreps, Vice President of Duke University, has agreed to lead the second of these Seminars, tentatively scheduled for April 5 and 6. Recently she has been serving as an economic consultant to the Carter administration transition team.

ABOUT THE WORKSHOPS

The Alexander Technique Workshop has been funded and will give opportunities to the faculty in the College of Fine Arts to work with Miss Marjorie Barstow, foremost authority on the technique of voice and body improvement. She and her students have worked with singers, actors, dancers, instrumentalists, and other performers.

PROPOSALS EVALUATION CRITERIA REFINED

All proposals will be weighed on a desirability/feasibility matrix system continuum on a scale of 1 to 10 possible points.

Desirable characteristics: has objectives designed to meet identified needs of program; proposes reasonable plan to achieve objectives; includes appropriate follow-up or evaluation procedures.

Feasible characteristics: satisfies interests, needs of specific group(s) of faculty (faculty clusters, departments, colleges, groups within the University); stays within budget guidelines.

The Faculty Advisory Committee will consider only proposals meeting the identified Faculty Development Program's Goals. Self-initiated proposals which are within the contracted area of the faculty member are generally outside the scope of the Faculty Development Program.

College based proposals must show specific needs and have the support of the Dean and/or members of the department or college.

APPLICATIONS are still available for other program proposals through the Faculty Development office at 302 Old Main, 3518.

# SPECTRUM

NEWS OF THE DRAKE FACULTY DEVELOPMENT PROGRAM

Vol I, 2  
January 1977

## READY---SET---GO

Howard Bowen, Chancellor Emeritus - Claremont Center for Educational Development, will set the pace for the Continuing Seminar in Higher Education for Drake's Faculty Development Program.

\*Note revised schedule

### Thursday, February 3

3:30 p.m. Values & Dilemma in Higher Education  
Open Meeting in Bulldog Theatre  
followed by  
Conversation and Libations, Upper Gallery

### Friday, February 4

12:00 Buffet Lunch (Olmsted), Faculty and Guests  
(Call 3518 by Wednesday, 4:00 p.m. - for  
reservations - \$3.25)  
Economics and Options

3:00 p.m. Educational Outcomes  
Open Meeting in Bulldog Theatre

## A FOLLOW-UP SEMINAR

A follow-up seminar is proposed for late spring featuring another forerunner in Higher Education.

## NEW PROPOSALS FUNDED BY FACULTY DEVELOPMENT PROGRAM

John Haganan - is organizing a two day workshop for the English Department to determine to what extent the National Council of Teachers of English position "students' right to their own language" is valid at Drake and to develop teaching strategies for implementing the results in their Freshman English classes.

Figure 37

SPECTRUM Vol I, 2<sup>1</sup>

<sup>1</sup>J. Gerlovich and P. Dyer, SPECTRUM - News of the Drake Faculty Development Program (Drake University), I, No. 2 (January, 1977).

Figure 37 (Continued)

Ann Schodde - is organizing separate workshops on Assertive Training for Men and Women Faculty to teach people the difference between assertion and aggression; help people identify and accept their own personal rights and those of others; reduce existing obstacles to assertive action, and develop skills through active practice.

Peter Conrad and Joseph Schneider - are organizing a Seminar on Qualitative Research Methods in the Social Sciences to develop teaching strategies and techniques that employ qualitative research methods for Drake Faculty.

Don Castleman - is making arrangements to send two Law Professors to the University of the Pacific, Sacramento, California to obtain skills devoted to instruction in the art of teaching law. These professors will formulate a program of workshops for the edification of the remainder of the Drake Law Faculty.

Philip Houle - is organizing plans to send faculty representatives from various disciplines to the 1977 Conference on Computers in Undergraduate Curricula at Michigan State University. The purpose is to promote the effective usage of computers in undergraduate education.

Allen Saul - is coordinating scheduling for an outside consultant from Michigan State University (Professor D. Cushman) to assess the curricular changes made in the Department of Speech Communications.

#### NOTEWORTHY

March 1 - Deadline for proposal acceptance. Funds are still available in many areas such as: instruction, advising, student needs, new skills, post disciplinary programs, and program evaluation.

Gary Reiss, Faculty Advisory Committee member, Prudence Dyer and Jack Cerlovich participated in the Kansas City Regional Conference on Higher Education centered about Faculty Development Programs.

Alexander Technique - from Gary Hebbs proposal in the College of Fine Arts has been quite successful and qualitatively evaluated and judged a great success in goal achievement and personal aid by participants.

Prudence Dyer was invited to participate in sessions of faculty college and serve as a co-ordinator for the Faculty Development Program at the University of Wisconsin - Oshkosh. Many ideas are applicable to Drake's program.

# SPECTRUM

NEWS OF THE DRAKE FACULTY DEVELOPMENT PROGRAM

Vol I, 3  
March 1977

## EXTENDED SERVICES --- FUNDS AVAILABLE

Two types of faculty initiated Proposals are now eligible for consideration according to the Advisory Committee's newly expanded guidelines for Extended Services. Each of the new areas is related to the goal of improving instructional skills:

### 1. MAJOR CURRICULUM DEVELOPMENT -- Awards in the \$1,000 range for

- . the preparation of new program(s) across departments or colleges involving extended planning and development -- with teams or groups focusing on a variety of aspects of a single issues.
- . new methods of curriculum or course organization related to instructional improvement.
- . new developments within disciplines but outside general range of the individual's professional preparation.

### 2. OFF-CAMPUS WORKSHOPS OR SEMINARS -- Awards in the \$400 - \$1,000 range

Proposals related to improving instructional skills and containing a "multiplying factor" -- a system for informing or training colleagues upon return to campus.

- . expenses for tuition or registration, domestic transportation, housing

## EXTENDED LEADERSHIP ROLES -- 3-4 Appointments by Invitation or Contract

A third category of Extended Service Awards will be by invitation or individual contract with the Faculty Development Program for instructional or leadership roles with Drake colleagues in campus programs. Guidelines include these factors:

- . faculty member having skill or expertise in given needed leadership role
- . faculty member already carrying a full academic or staff assignment but is asked by Faculty Development Program to conduct an extended workshop (beyond two full days) or seminar in hours beyond normal workload or normal academic or contract year
- . rates: not to exceed extra service guidelines of the C.C.E. (\$150 full day; \$75 half day; \$25 per contact hour) or in Faculty Manual 3.522

Criteria and guidelines for faculty initiated proposals are available from the Faculty Development Office, 302 Old Main, 3518. The distribution matrix (over) displays funded projects by program goal and by university unit. An uncommitted balance of \$15,000 is still available for spring and summer workshops.

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Figure 38

SPECTRUM Vol I, 3<sup>1</sup>

<sup>1</sup>J. Gerlovich and P. Dyer, SPECTRUM - News of the Drake Faculty Development Program (Drake University, I, No. 3 (March, 1977)).

Figure 38 (Continued)

Assertive Training for Women and Men Faculty and Staff project, conducted by Steve Schodde and Elaine Burgess is being held March 22 and 23 with full classes. The program is for faculty who desire training to become more personally effective on the job as well as in their personal lives. An additional 4 - phase session for Faculty and Staff Men will be held on May 17, 19, 24, and 26 in 2 hour blocks. Those wishing to register should call the Faculty Development Program. 3518.

Jacqueline P. Wiseman, Professor of Sociology at the University of California - San Diego and author of numerous books on the sociology of deviance, will conduct a workshop in the social sciences and related fields. The workshop, proposed by J. Schneider and P. Conrad, will emphasize teaching qualitative research methods. The program will take place on the morning, afternoon, and evening of March 24 and morning and afternoon of March 25. Those interested in attending should contact Joseph Schneider, 2158 or Peter Conrad, 2157.

## DISTRIBUTION MATRIX OF FUNDED PROJECTS

	Professional or Personal Goals	Instructional Methodology	Student Needs or Concerns	New Skills, Knowledge	Post- Disciplinary Programs	Program Evaluation	Other
Individual Faculty Member (Teaching)	Assertiveness Training (CCE)						
Department or "Clusters"		Alexander Technique (G. Hobbs)  Tchg. Fresh. Comp. (J. Hageman)	.	CASSTCE (K. Miller, J. Archer, E. Hoods)		Curric. Re- view Speech Comm. (A. Scult)	
College		Tchg. Low (D. Castleman)					
Groups within University				Qualitative Methods in S.S. (Conrad, Schneider)			Kansas City Regional: Instruction (Stjernberg)
(Non- Teaching Faculty)							
University Community				Computers in Instruction (P. Houle)	Higher Ed. I (P. Dyer)		

1a. University needs have been identified.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

1b. Faculty are aware of General College goals.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

1c. Department's objectives have been delineated.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

2. Consultant aided you personally in understanding your program strengths and weaknesses.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

3. Student perceived needs and goals are parallel to those of the faculty.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

Figure 39  
 Evaluation Form

<u>RESEARCH</u>	<u>DEVELOPMENT</u>	<u>INSTRUCTIONAL DEVELOPMENT</u>	<u>POST-DISCIPLINARY INSTITUTES</u>
			(Instructional Method- ology and/or Disciplin- ary Growth and Renewal,...)
Research Grants <sup>a</sup>	Summer Stipends <sup>a</sup>	Workshop.Seminars .on campus .off campus	Limited term projects (3 year study on Urban Affairs; or 2 year study on Futures; Hunger,...)
Matching Grants <sup>a</sup>	Resource(s) Center(s) (w/modest equip- ment?)	Incentive Grants Experimentation <sup>a</sup>	Sabbatical Grants <sup>a</sup>
Sabbatical Grants <sup>a</sup>	Sabbatical Grants <sup>a</sup>	Travel Funds <sup>a</sup>	
	Curriculum Review and Development	Mini-Sabbatical Grants <sup>a</sup>	
		. I.D. Centers	
		Instructional Clinics (Evaluation-Dev.)	

<sup>a</sup>Programs currently in existence on the  
Drake University campus, but in other  
offices.

Figure 40

Working Draft for an Integrated Program for  
Professional and Disciplinary Development<sup>1</sup>

<sup>1</sup>P. Dyer and J. Gerlovich, "Working Draft for an Integrated Program for Profes-  
sional and Disciplinary Development," Faculty Development Program (Des Moines, Iowa:  
Drake University, 1977). (Xeroxed.)



## APPENDIX D

### INDIVIDUAL PROJECT RESULTS

1. To what degree do you feel the program goals were met?

A. Introduce faculty members to the "Alexander Technique"

Individual responses

0	1	2	3	4	5	6	7	8	9	10
					1	1	1	2	1	6
not					some					very
at all					what					well

COMMENTS:

N =	12
Mean =	8.58
S.D. =	2.22
Abstain =	0

Faculty sessions very useful.  
Technique was introduced and used well.

$$SD = \sqrt{\frac{\sum fx^2}{N-1}}$$

B. Assess the value of the technique to Fine Arts students

Individual responses

0	1	2	3	4	5	6	7	8	9	10
					1	1		4		5
not					some					very
at all					what					well

COMMENTS:

N =	12
Mean =	8.08
S.D. =	1.19
Abstain =	1

Student feedback very positive.  
Voice students benefited most.  
I have neither the experience nor knowledge to make an assessment.

C. Teach the technique to Fine Arts students

Individual responses

0	1	2	3	4	5	6	7	8	9	10
	1			1	2	2	1	2		1
not					some					very
at all					what					well

COMMENTS:

N =	12
Mean =	5.08
S.D. =	2.09
Abstain =	2

Need time to incorporate into teaching. More exposure for mastery. Don't believe students experienced the technique enough.  
Any form allowing students to understand relationship between structure/function is valuable.

Figure 41

Alexander Technique Workshop  
Evaluation Form

Figure 41 (Continued)

2. Did this program help you to become more efficient, personally, in your area of specialization?

Individual

responses

1 1 3 2 3  
 0---1---2---3---4---5---6---7---8---9---10  
 did some very  
 not help help helpful

COMMENTS:

N = 12  
 Mean = 5.50  
 S.D. = 2.03  
 Abstain = 2

Anticipate making good use of the technique. More work needed in technique. Interesting new concepts. Will help in my classes.

3. Did this program help you to become a better teacher in your area of specialization?

Individual

responses

1 1 2 1 1 5  
 0---1---2---3---4---5---6---7---8---9---10  
 did some very  
 not help help helpful

COMMENTS:

N = 12  
 Mean = 6.75  
 S.D. = 2.11  
 Abstain = 1

Not had chance to test the technique. Need evaluation over a period of time. Good way to bridge gap between conceptual and action experiences.

4. Do you feel the need for a spring follow-up in the "Alexander Technique"

Yes 8 No 3 Abstain 1

(1-3) Total N = 48  
 Weighted Mean = 7.23  
 S.D. = 1.97  
 Abstain = 6

1. Did you develop any new awareness of trends in Higher Education?

Individual responses	3	3	16	4	1
	0-----1-----2-----3-----4-----5				
	none		some		very much

$$S.D. = \sqrt{\frac{\sum fx^2}{N-1}}$$

COMMENTS:

Bowen's comment reflected his personal bias, not current higher education trends. No ideas on implementation. Helpful, stimulating introductory program. Only half the staff attended/could fund be better spent another way. Staff already aware of new trends, ideas in higher education.

N = 27  
Mean = 2.89  
S.D. = .93  
Abstain = 0

2. Did you feel there was personal value in allocating time for the small group sessions?

Individual responses	3	3	8	9
	0-----1-----2-----3-----4-----5			
	none		some	very much

COMMENTS:

Sharing ideas through face-to-face interaction was most useful experience of the two days (3). General sessions were more informative. Bowen did not meet the challenge. Excellent faculty reactions. Format extremely valuable, enjoyed the interchange.

N = 23  
Mean = 4.0  
S.D. = 1.04  
Abstain = 0

3. Did you feel the interactive, small group sessions you attended were effective in helping you understand other individual's points of view within the University context?

Individual responses	6	10	4
	0-----1-----2-----3-----4-----5		
	none	some	very much

COMMENTS:

Bowen mission, of serving as a catalyst, was accomplished. Bowen "shot-down" adult learner session before it got started. Interesting interaction with other colleges. Would enjoy sessions with other individuals in other colleges at Drake. Good interaction.

N = 23  
Mean = 3.39  
S.D. = 0.83  
Abstain = 0

Figure 42

Seminar in Higher Education I  
Evaluation Form

Figure 42 (Continued)

4. Did you feel the \_\_\_\_\_ session(s) which you attended was (were) of personal value?

A. Economic Projections and Enrollment in Private Higher Education

Individual responses	1	2	5	3	4		
	0----	1----	2----	3----	4----	5	
None			some		very much		
						N =	15
						Mean =	3.46
						S.D. =	1.25
						Abstain =	0

B. Trends in Educating the Adult Learner

Individual responses	3	4	4	3	1		
	0----	1----	2----	3----	4----	5	
None			some		very much		
						N =	15
						Mean =	2.67
						S.D. =	1.23
						Abstain =	0

C. Economics and Options

Individual responses	1	1	5	1	4		
	0----	1----	2----	3----	4----	5	
None			some		very much		
						N =	15
						Mean =	2.80
						S.D. =	1.33
						Abstain =	0

D. Educational Outcomes

Individual responses		3	6	6	2		
	0----	1----	2----	3----	4----	5	
None			some		very much		
						N =	17
						Mean =	3.41
						S.D. =	0.94
						Abstain =	0

COMMENTS:

Just got started when program ended. Bowen did not deal with specific problems at Drake. More small group interactions sessions needed. Not much practical information from Bowen.

Total = 135  
Weighted Mean = 3.26  
S.D. = 1.04  
Abstain = 0

5. Would you be interested in follow-up sessions?

18 yes 4 no  
If yes, check specific area

- A. Economic Projections and Enrollment in Private Higher Education 7  
B. Trends in Educating the Adult Learner 12  
C. Economics and Options 4  
D. Educational Outcomes 10

COMMENTS:

Figure 42 (Continued)

## 6. Suggestions for Future Programs are Topics:

Public and private higher education; differences in role, character and clientele; adult education psychology; programs and goals congruency needed; adult learner, how to teach? faculty apathy; need pragmatic data, facts; Fine Arts topics; small group projects; Deal with specific identified projects; curriculum at Drake; accountability; teacher training; and time management skills.

1a. University needs have been identified.  
Individual responses

1-----2-----3-----4-----5	2	1
strongly disagree	disagree	undecided
	agree	strongly agree

N = 3  
Mean = 4.33  
S.D. = .53  
Abstain = 1

1b. Faculty are aware of General College goals.  
Individual responses

1-----2-----3-----4-----5	1	2
strongly disagree	disagree	undecided
	agree	strongly agree

N = 3  
Mean = 4.67  
S.D. = .53  
Abstain = 1

1c. Department's objectives have been delineated.  
Individual responses

1-----2-----3-----4-----5	1	2
strongly disagree	disagree	undecided
	agree	strongly agree

N = 3  
Mean = 4.67  
S.D. = .53  
Abstain = 1

COMMENTS:

We were operating on some assumptions which needed discussion. Reminded us to review our purposes. Course of action for dealing with discrepancies was laid out.

$$S.D. = \sqrt{\frac{\sum fx^2}{N-1}}$$

2. Consultant aided you personally in understanding your program strengths and weaknesses.

Individual responses

1-----2-----3-----4-----5	3
strongly disagree	disagree
	undecided
	agree
	strongly agree

Figure 43

Curriculum Review in Speech Communications  
Evaluation Form - Faculty

Figure 43 (Continued)

COMMENTS:		N =	2
Found weak areas and how to strengthen them.		Mean =	5
		S.D. =	0
		Abstain =	1
3. Student perceived needs and goals are parallel to those of the faculty.			
Individual responses	1	1	
1-----2-----3-----4-----5			
strongly disagree	disagree	undecided	agree strongly agree
COMMENTS:		N =	2
Did not talk to consultant concerning student reactions. Found students and faculty had different goals. Student goals most similar to faculty member are those they worked most closely with.		Mean =	3
		S.D. =	1
		Abstain =	2
4. Consultant was valuable in providing methods for improving your personal skills.			
Individual responses	2	1	
1-----2-----3-----4-----5			
strongly disagree	disagree	undecided	agree strongly agree
COMMENTS:		N =	3
Made some simple, effective suggestions.		Mean =	4.33
		S.D. =	.53
		Abstain =	1
5. Consultant suggestions will be incorporated into your program.			
Individual responses	2	1	
1-----2-----3-----4-----5			
strongly disagree	disagree	undecided	agree strongly agree
COMMENTS:		N =	3
Teaching suggestions, yes. Need further help outside and within the department.		Mean =	4.33
		S.D. =	.53
		Abstain =	1



Figure 43 (Continued)

6. A follow-up outside consultation program should be conducted after one year.				
Individual responses	1		2	
	1-----2-----3-----4-----5			
	strongly disagree	undecided	agree	strongly agree
COMMENTS:	N = 3			
Never thought about it.	Mean = 3.67			
	S.D. = .53			
	Abstain = 1			
7. Other Suggestions			Total N =	23
			Weighted	
			Mean =	4.30
			S.D. =	0.42
			Abstain =	8
COMMENTS:				
Learned a great deal about my teaching effectiveness from the consultant.				

1a. University needs have been identified

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

1b. Faculty are aware of General College goals.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

1c. Department's objectives have been delineated.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

2. Strengths and weaknesses of program could be readily identified.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

3. Student perceived needs and goals are parallel to those of the faculty.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

Figure 44

Curriculum Review in Speech Communications  
 Evaluation Form - Consultant

Figure 44 (Continued)

4. Faculty were receptive to suggestions to improving personal skills.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

5. Suggestions will be incorporated into the speech communications program.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

6. A follow-up outside consultation program should be conducted after one year.

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly  
 disagree agree

COMMENTS:

7. Other suggestions

COMMENTS:

Total responses = 8  
 Mean = 4  
 S.D. = .86

$$S.D. = \sqrt{\frac{\sum fx^2}{N-1}}$$

t-test<sup>1</sup>

$$t = \frac{(\bar{x}_1 - \bar{x}_2)}{S(\bar{x}_1 - \bar{x}_2)} = \sqrt{\left[ \frac{N_1 S_1^2 + N_2 S_2^2}{N_1 + N_2 - 2} \right] \left[ \frac{1}{N_1} + \frac{1}{N_2} \right]}$$

$$t = 0.93^*$$

$N_1$  = # of faculty

$N_2$  = # of consultants

$S_1$  = S.D. of faculty

$S_2$  = S.D. of consultants

P-statistic<sup>2</sup>

$$P = \frac{t^2 - 1}{t^2 - 1 + N_1 + N_2}$$

$$P = 0.25^{**}$$

\*Since 0.93 is less than 4.30, there is no significant difference between means. The speech communications faculty and the consultant are therefore in general agreement concerning project's goals.

\*\*25% of the variation in one variable (speech communications faculty responses, consultant responses) can be accounted for by just knowing the other variable.

<sup>1</sup>J. M. Gottman and R. E. Clasen, Evaluation in Education: A Practitioner's Guide (Itasca, Illinois: F. E. Peacock Publishers, Inc., 1974), pp. 409-420.

<sup>2</sup>Ibid.

Figure 45

Statistical Analysis of Speech  
Communications Workshop



Figure 46 (Continued)

4. The workshop(s) attended was (were) helpful in developing personal skills in teaching qualitative methods.

Individual

Responses

	1-----	2-----	3-----	7-----	2-----
	1-----	2-----	3-----	4-----	5-----
	strongly	disagree	undecided	agree	strongly
	disagree				agree

COMMENTS:

N =	9
Mean =	4.22
S.D. =	0.27
Abstain =	3

Obligations prevented me from attending all programs desired.  
Picked up a number of good ideas.  
My response would have been positive if I could have attended all sessions.

5. The workshop(s) attended was (were) helpful in clarifying personal attitudes toward teaching qualitative methods.

Individual

Responses

	1-----	2-----	3-----	4-----	4-----
	1-----	2-----	3-----	4-----	5-----
	strongly	disagree	undecided	agree	strongly
	disagree				agree

COMMENTS:

N =	8
Mean =	4.50
S.D. =	0.25
Abstain =	4

Definitely helped me.

6. The workshop(s) attended was (were) helpful in your personal research.

Individual

Responses

	1-----	3-----	2-----	5-----
	1-----	2-----	3-----	4-----
	strongly	disagree	undecided	agree
	disagree			strongly
				agree

COMMENTS:

N =	11
Mean =	3.82
S.D. =	0.44
Abstain =	1

Sessions provided much food for thought.

7. The workshop(s) attended was (were) helpful in clarifying personal values in teaching qualitative methods.

Individual  
Responses

1-----2-----3-----4-----5  
strongly disagree disagree undecided agree strongly agree

COMMENTS:

Would definitely be part of my methods course.

N = 7  
Mean = 4.29  
S.D. = 0.29  
Abstain = 5

8. The consultant (Dr. Wiseman) was effective in this program.

Individual  
Responses

1-----2-----3-----4-----5  
strongly disagree disagree undecided agree strongly agree

COMMENTS:

Excellent presentation of ideas by presenter.

N = 11  
Mean = 4.55  
S.D. = 1.14  
Abstain = 1

9. A follow-up to this program should be conducted.

Yes 10 No 2 Abstain 2

10. Suggestions, comments:

Would be good to follow-up this workshop with another workshop of specific techniques. Additional methods seminars needed. Interesting that this evaluation is quantitative. Need to be more participants involved. Excellent way of keeping faculty abreast of disciplinary developments, hope they continue. Need more time for discussion and exchange following presentations. Very much appreciate being invited.

Total N = 66  
Weighted Mean = 4.39  
S.D. = 0.59  
Abstain = 18

1. Program was successful in meeting its overall goal of increasing your personal effectiveness.

Individual

Responses

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly agree

COMMENTS:

$$S.D. = \sqrt{\frac{\sum fx^2}{N-1}}$$

N = 3  
 Mean = 4.33  
 S.D. = 0.58  
 Abstain = 0

2. Training program procedures were effective for learning the difference between assertion, aggression, passivity, and politeness.

Individual

Responses

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly agree

COMMENTS:

N = 3  
 Mean = 4.33  
 S.D. = 0.58  
 Abstain = 0

3. Training program procedures were effective for identifying and accepting personal rights as well as the rights of others.

Individual

Responses

1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly agree

COMMENTS:

N = 3  
 Mean = 4.00  
 S.D. = 1.00  
 Abstain = 0

Figure 47

Men's Assertiveness Training Opportunities  
 Evaluation Form



Figure 47 (Continued)

4. Training program procedures were effective for reducing blocks to assertive behaviors.

Individual

Responses

1-----2-----3-----4-----5  
 1-----1-----1  
 strongly disagree undecided agree strongly agree

COMMENTS:

N = 3  
 Mean = 4.00  
 S.D. = 1.00  
 Abstain = 0

5. Training program procedures were effective for practicing assertive responses.

Individual

Responses

1-----2-----3-----4-----5  
 1-----1-----1  
 strongly disagree undecided agree strongly agree

COMMENTS:

N = 3  
 Mean = 4.00  
 S.D. = 1.00  
 Abstain = 0

6. Instructional methods incorporated were appropriate.

Individual

Responses

1-----2-----3-----4-----5  
 1-----1-----1  
 strongly disagree undecided agree strongly agree

COMMENTS:

N = 3  
 Mean = 4.00  
 S.D. = 1.00  
 Abstain = 0

7. A follow-up mixed men and women's program should be conducted.

Individual

Responses

1-----2-----3-----4-----5  
 1-----2-----1  
 strongly disagree undecided agree strongly agree

COMMENTS:

N = 3  
 Mean = 4.33  
 S.D. = 0.58  
 Abstain = 0

Figure 47 (Continued)

8. I would recommend such training to other faculty/  
staff members.

Individual

Responses

1-----	2-----	3-----	2-----	1-----
strongly	disagree	undecided	agree	strongly
disagree				agree

COMMENTS:

Just a bit too many role playing  
situations that involved only a  
pair at a time. Why not involve  
more at the same time? I enjoyed  
and benefited from the program. I think the leader  
did a fine job. Abbreviated four session did not  
seem complete enough. High drop-out rate reduced  
effectiveness.

N =	3
Mean =	4.33
S.D. =	0.58
Abstain =	0

Total N =	24
Weighted Mean =	4.17
S.D. =	0.54
Abstain =	0

1. Program was successful in meeting its overall goal of increasing your personal effectiveness.

Individual

Responses 1 6 1  
 1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly agree

COMMENTS:

Need to practice some of the things learned before I can judge. Much more awareness--handled more things well. I'd like more practice yet, concerning additional situations.

$$S.D. = \sqrt{\frac{\sum fx^2}{N-1}}$$

N = 8  
 Mean = 4.00  
 S.D. = 0.53  
 Abstain = 0

2. Training program procedures were effective for learning the difference between assertion, aggression, passivity, and politeness.

Individual

Responses 2 4 2  
 1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly agree

COMMENTS:

On the line situations depend on the person involved. Well done. I don't think we worked on differences as much as techniques of assertion. Wish we would have done more here! We didn't practice each ourselves.

N = 8  
 Mean = 4.00  
 S.D. = 0.76  
 Abstain = 0

3. Training program procedures were effective for identifying and accepting personal rights as well as the rights of others.

Individual

Responses 1 5 2  
 1-----2-----3-----4-----5  
 strongly disagree undecided agree strongly agree

Figure 48

Women's Assertiveness Training Opportunities  
 Evaluation Form

Figure 48 (Continued)

## COMMENTS:

Yes, and it's important. Stress was on personal rights.

N = 8  
Mean = 4.13  
S.D. = 0.60  
Abstain = 0

4. Training program procedures were effective for reducing blocks to assertive behaviors.

## Individual

Responses 4 2 2  
1-----2-----3-----4-----5  
strongly disagree undecided agree strongly agree

## COMMENTS:

As much was done as possible in a short time. I still have blocks.

N = 8  
Mean = 3.75  
S.D. = 0.88  
Abstain = 0

5. Training program procedures were effective for practicing assertive responses.

## Individual

Responses 2 3 3  
1-----2-----3-----4-----5  
strongly disagree undecided agree strongly agree

## COMMENTS:

Further time needed. Must have been good. Much easier to "role play" in the end. Practicing the responses helped most. Need more practice.

N = 8  
Mean = 4.13  
S.D. = 0.83  
Abstain = 0

6. Instructional methods incorporated were appropriate.

## Individual

Responses 2 2 4  
1-----2-----3-----4-----5  
strongly disagree undecided agree strongly agree

## COMMENTS:

One method back fired temporarily but was handled well—"ignoring" technique. More outside reading would have been helpful to me.

N = 8  
Mean = 4.25  
S.D. = 0.89  
Abstain = 0

Figure 48 (Continued)

7. A follow-up mixed men and women's program should be conducted.

Individual

Responses	2	2	2	2
1-----2-----3-----4-----5				
strongly disagree	disagree	undecided	agree	strongly agree

COMMENTS:

N =	8
Mean =	3.5
S.D. =	1.20
Abstain =	0

If all had taken the basic course. Not necessary. It would depend on the individuals involved. Some people would welcome this while others would be too uncomfortable for it to be effective. This would be extremely useful. Personally, I'd have trouble relating equally to men. I'd really like to but the men I know right now are all on ego trips.

8. I would recommend such training to other faculty/staff members.

Individual

Responses	1	4	3
1-----2-----3-----4-----5			
strongly disagree	disagree	undecided	agree
			strongly agree

COMMENTS:

N =	8
Mean =	4.25
S.D. =	0.71
Abstain =	0

The hours spent were very worthwhile and provided a good foundation for further individual learning. Some don't need or would be receptive to it. Many would like it. It would depend on the person. Then maybe we'd have better communication, understanding, and better relationships. Specifically within own department.

N =	64
Weighted Mean =	4.00
S.D. =	0.77
Abstain =	0

1. Please check the session(s) you attended.

Lou Kelly 3:30-5:00 PM Thursday 8

Open session 7:30 Thursday 11

Gary Tate 9:00-10:15 AM Friday 10

John Butler 10:30-11:45 AM Friday 12

$$S.D. = \sqrt{\frac{\sum fx^2}{N-1}}$$

2. Program(s) was (were) helpful in developing personal knowledge about the NCTE resolution "The Students' Right to Their Own Language".

Individual

Responses

			10	2
1-----	2-----	3-----	4-----	5
strongly	disagree	undecided	agree	strongly
disagree				agree

COMMENTS:

N = 13

Mean = 4.00

Disappointed in answer given to student by consultant. I'm glad both NCTE and CCCC were represented.

S.D. = 0.65

Abstain = 2

Could not attend the open session. If it takes so much comment, the resolution should be revised.

NCTE resolution useful only in developing personal understanding. No practicality. Reading resolutions helped.

3. Program(s) was (were) helpful in developing personal understanding of the relationship between an individual and his language.

Individual

Responses

	1	4	6	4
1-----	2-----	3-----	4-----	5
strongly	disagree	undecided	agree	strongly
disagree				agree

COMMENTS:

N = 15

Mean = 3.87

Butler's example of cognitive strategies underlying methodologies were particularly helpful. This was nothing new, though the refresher helped. Theory session were of limited usage. Didn't learn anything new. Extraordinary good panel discussions.

S.D. = 0.92

Abstain = 0

Figure 49

Figure 49 (Continued)

4. Program(s) was (were) helpful in developing personal attitudes towards dialects other than Edited Standard English.

Individual

Responses	3	3	5	1
1-----2-----3-----4-----5				
strongly disagree	disagree	undecided	agree	strongly agree

COMMENTS:

N = 12  
 Mean = 3.33  
 S.D. = 0.99  
 Abstain = 3

If development means change, then no. I was glad to have exposure to the dialectic in the classroom. Not much help on the practical level. Sessions only reinforced my ideas and beliefs concerning linguistics. Didn't change my already liberal approach. Ideas were vague.

5. Program(s) was (were) helpful in developing personal skill in teaching language in Freshman English.

Individual

Responses	4	3	4	2
1-----2-----3-----4-----5				
strongly disagree	disagree	undecided	agree	strongly agree

COMMENTS:

N = 13  
 Mean = 3.30  
 S.D. = 1.11  
 Abstain = 2

High caliber leadership brought in. Don't believe the practical part of the conference dealt with how to teach. There is no one way to teach writing. Some good tips, but no systematic curriculum outline.

6. Program(s) was (were) helpful in developing values for dealing positively with students' dialects.

Individual

Responses	3	6	4
1-----2-----3-----4-----5			
strongly disagree	disagree	undecided	agree
			strongly agree

COMMENTS:

N = 13  
 Mean = 4.42  
 S.D. = 0.84  
 Abstain = 2

Emphasis was placed on respecting what the student says rather than how he says it. Writer's feelings are closely tied to his modes of expression. Nothing new.

Figure 49 (Continued)

7. Program(s) was (were) helpful in re-examining the nature of teaching composition.

Individual

Responses

1-----2-----3-----4-----5  
 strongly disagree      disagree      undecided      agree      strongly agree

COMMENTS:

N = 13  
 Mean = 4.46  
 S.D. = 0.52  
 Abstain = 2

Faculty project coordinator very effective. Faculty response not as good as expected. Consultants were very effective. Many provocative things came out of the meeting for me. It's always good to think through your discipline. This was the primary value of such programs.

Total N = 79  
 Weighted Mean = 3.84  
 S.D. = 0.82  
 Abstain = 11

8. Recommend follow-up program. Yes 10 No

Program was excellent and should be carried further.

9. Please comment on the strengths and weaknesses of the consultants.

Good choice of speakers. Consultants presented excellent cases for their points of view. Consultants knew their areas. Don't think a better group of consultants could have been assembled. Consultants highly informative. Consultants were unique and interesting.

10. Other suggestions.

I wish I could have attended more sessions. Small group sessions (4 or 5 people) could have been helpful. Discussions of theory are too subjective to be very useful. Let people know about the program. Threaten, coerce, beg professors to come.



APPENDIX E

EXCERPTS FROM THE DRAKE UNIVERSITY FACULTY  
DEVELOPMENT PROGRAM PROPOSAL TO THE  
NORTHWEST AREA FOUNDATION

## GUIDELINES

Submit six (6) copies of an application developed according to the following outline.

- A. Describe the problem or need the project will address, assessing the institution's current situation and where it would like to be in five years, and indicating how the grant will help the institution reach that point.
- B. State the project goal and objectives.
- C. List strategies for attaining that goal and objectives.
- D. Describe the planning process through which the proposal was conceptualized and the parties within the institution who were consulted in its development.
- E. List project participants, appending vitae for each with major responsibilities.
- F. Provide a three-year implementation schedule.
- G. Provide a three-year budget. (Each college is asked to provide 25% of that amount.)
- H. Describe the evaluation plan. . . .
- I. If appropriate, comment on the project's capability for transference to other departments of the institution or to other institutions.
- J. Enrollment: 1969-70 1970-71 . . . 1975-76  
Head Count  
FTE
- K. Describe selectivity standards for admission in 1969-70, 1975-76.
- L. Education & General:  
1969-70 1970-71 . . . 1975-76  
Expenditures:  
Revenues:
- M. Ratio of assets to liabilities  
Assets: \$ \$ . . . \$  
Liabilities: \$ \$ . . . \$
- N. Develop a one-page summary of the proposal. (It will be used to describe the project to the Foundation's Board of Directors; thus, it should be written from a non-educator's point of view.)<sup>1</sup>

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<sup>1</sup>Committee on Status of Profession, "Drake University Faculty Development Program Proposal to the Northwest Area Foundation," March 30, 1976, p. 7.

## STATEMENT OF THE PROBLEM

## A. The Problem

Continued professional growth by faculty is particularly important for a university such as Drake, with its strong commitment to quality teaching and close contact between faculty and students. Due to economic and enrollment pressures, Drake has set a goal of increasing the student/faculty ratio from 16 to 1 at present to 20 to 1 in 1980. This change contemplates stabilizing the faculty at a reduced number in the future. At the same time, meeting institutional responsibilities to present students, as well as serving future students, become a critical problem for both the individual faculty member and the university at large. Inducing professional growth on the part of the faculty is essential to maximize instructional effectiveness in the 1980's. The current danger of faculty stagnation must be alleviated by a systematic program to stimulate faculty development within a changing and more demanding University context.

Because the problem is national in scope, many professional development centers have appeared recently with a concomitant mushrooming of literature concerning improvement by the faculty member. Unfortunately, the impact of these developments has been minimal for two basic reasons. First, information pertaining to faculty development is not adequately disseminated to the individual faculty member. Second, this material is not interpreted in terms of the specific problems and conditions pertaining to the institution attempting its utilization.

Dissemination of information regarding an institution's specific student body is also a problem. Although data are available on every campus, there have been few concerted efforts either to inform the faculty member of the characteristics of the student body or to design instructional programs which recognize such factors. As a result, Drake, like most institutions, misses the full opportunity to coordinate instruction with direct and perceived student needs--a process upon which much of this University's reputation is based.

This proposal seeks to establish a coordinated and continuous faculty development program at Drake University. The program will concentrate on disseminating information pertinent to both the professional concerns of faculty members and the abilities and expectations of the student body. The program will transmit systematically to the faculty the best contemporary opinion and research related

to all areas of professional practice. This will be done in an atmosphere of University-wide commitment to the concept of faculty development. It is hoped that vitality, productivity and innovation--often characteristic of faculty members in their early years--will be combined with experience and maturity to make the Drake faculty member a more complete professional at every stage of growth.

#### B. Goals and Objectives

The overall goal of the project is to improve the quality of teaching at Drake University. The project will attempt to meet this goal by identifying issues that confront the individual faculty member as a teacher, person, and member of the University community and by providing coordinated assistance for the faculty member in the resolution of these issues. This goal is based on the assumption that detailed and systematic attention must be given by the faculty member to his or her methods, goals, values, attitudes and constraints; otherwise, little or no change will occur in the kind of teaching and learning that takes place in their classroom. To achieve this goal, two specific goals have been established.<sup>1</sup>

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<sup>1</sup>Ibid., pp. 1-3.

## MAJOR GOALS

Goal I: To enhance the professional skills, vitality, productivity and innovativeness of the faculty, thereby improving student learning opportunities:

## Objectives:

1. At least one-half the faculty will participate in some phase of the faculty development program each year, with all faculty participating over the course of the entire program;
2. Perceived needs of faculty in professional areas of instructional, organizational and personal development will be addressed;
3. Faculty will be involved in goal-setting processes and will specify their own professional development goals for following semesters; and,
4. Faculty will incorporate strategies and techniques presented through the faculty development program into their personal teaching and advising activities.

Goal II: To improve the learning process by inter-relating student needs and expectations with the teaching and advising methods of faculty.

## Objectives:

1. Perceptions and expectations of students will be monitored throughout their attendance at the University;
2. Information concerning the strengths, weaknesses, expectations and perceptions of the student body, by department, will be disseminated to faculty;
3. Faculty will utilize this information about the student body to improve teaching and advising methods; and,
4. Utilization of information regarding academic strengths and weaknesses of the student body will facilitate student mastery of skills in areas of identified weaknesses.<sup>1</sup>

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<sup>1</sup>Ibid., p. 4.